

Cambridge Criticizes Institute

Council is Concerned
Over Dorm Traffic

By Shankar Mukherji
STAFF REPORTER

The Cambridge City Council met last night with MIT and Harvard officials to discuss plans for future development.

City councillors were concerned with MIT's expansion into the neighborhood of Cambridgeport and into the eastern part of Cambridge. The Council was particularly worried about the impact of new housing projects designed to bring all freshmen and 50 percent of the graduate student population into campus housing.

Council requests master plans

The council requested so-called "master plans" from Harvard and MIT, which would detail plans for each university's future expansion. Stanford University, which has provided a detailed ten-year expansion plan, was frequently used as an example.

"In your ideal we'd like to know where you're headed," said Councillor Henrietta Davis. To date, neither Harvard nor MIT has presented such a plan.



PEDRO L. ARRECHEA—THE TECH

Chancellor Lawrence S. Bacow '72 points out MIT's properties on a campus map at a Cambridge City Council meeting last night. Bacow and Sarah E. Gallop, co-director of government and community relations, answered questions about MIT's plans for development in Cambridge as part of a roundtable discussion.

Cambridgeport residents believe that the new graduate residences on Albany Street and the corner of Sidney and Pacific streets will disrupt the traffic patterns of surrounding communities. Residents also worried that students will not live in the new dormitories if cheaper housing is available off campus.

Chancellor Lawrence S. Bacow '72 said that MIT intends to reduce traffic within the new developments

by "candidly [raising] prices for parking on campus ... and increasing subsidies for public transit."

Furthermore, he said that filling the new housing "will not be a problem as currently we have a huge excess demand [for campus housing]."

Several members of the Council raised questions about the location of the new undergraduate dormitory on Vassar Street. The building,

which will house 350 undergraduates, ten graduate resident tutors and five faculty members, concerns many neighborhood residents. "We'd like you to build new housing," said Councillor Michael A. Sullivan, "[but] just not here."

Council considers lost taxes

Another issue of concern to the

City Council, Page 32

Freshmen Choose Officers

Class of 2004 Elects
Kim as President

By Jennifer Krishnan
STAFF REPORTER

The Class of 2004 elected Patrick Y. Kim '04 as their new president in last week's class council elections.

Joining Kim as newly elected officers are Vice President Matthew G. Richards '04, Secretary Katherine L. Garrison '04, and Treasurer Reuben L. Cummings '04. Vanessa Pena '04 and Stephen V. Samouhos '04 will serve as Social Chairs, and Nancy L. Keuss '04, Maxwell E. Planck '04, and Kristin D. Smith '04 will serve as Publicity Chairs.

33 percent of the class voted in the election, which was open for voting for more than three days. The candidates for Secretary and Publicity Chairs ran unopposed.

Seven out of nine of the new officers participated in pre-orientation programs. Garrison, Pena, Keuss, Planck, and Smith all participated in the Freshman Leadership Program, and Richards attended the

Elections, Page 25

Kerry Speaks at Development Forum

By Naveen Sunkavally
and Brian Loux
STAFF REPORTERS

In a keynote address to a forum on sustainable development held at MIT, Massachusetts Senator John Kerry made a strong plea to bring environmental issues to the forefront of politics and to reform the American education system.

The Regional Sustainable Development

Forum, a day-long series of events open to anyone with an interest in the environment, set out to further the development of the surrounding region in compliance with the principles of sustainable development.

MIT Chancellor Lawrence S. Bacow '72, the first speaker at the forum, highlighted MIT's environmental accomplishments. "The

Institute has a very long-standing commitment to the environment," he said, citing MIT's recycling and purchasing programs.

In addition, Bacow said, "Ten percent of MIT's research is devoted to the environment."

Kerry blasts current politics

Kerry began his speech with an attack on the current political and media climate. "Money in American politics is destroying our ability to make smart decisions," he said. Pointing to the current coverage of the presidential elections, Kerry said the media is more interested in titillating its audience rather than covering substantive issues.

In addition to political and media-related problems, Kerry also said the good economy has seduced people into taking the environment for granted. Kerry acknowledged that America has made significant gains since the 1970s on the environment, but he reminded his audience that the proper yardstick to measure environmental progress is not how much has been accomplished since the 1970s but how much more still needs to be accomplished.

"The environment was a voting issue in the 1970s. It's not a voting issue anymore," he said.

Kerry comes out against vouchers

In order to raise awareness of

Forum, Page 35

Irwin W. Sizer



MIT NEWS OFFICE
Professor Irwin
Sizer

Irwin W. Sizer, a former dean of the graduate school and Professor Emeritus of Biochemistry, died at his home in Bedford, Ma. on September 11. He was 90 years old.

Born in Bridgewater, Ma., Sizer received his undergraduate degree at Brown University in 1931. After receiving his doctorate at Rutgers University in 1957, Sizer returned to Massachusetts for a sixty year career at MIT.

While at MIT, he held several important academic positions. He became the chairman of the department of biology in 1957 and dean of the graduate school in 1967. A strong proponent of diversity, Sizer worked during his tenure as a dean to improve the number of women and minorities at the institute.

Sizer also worked extensively to create collaborative academic programs with other Massachusetts universities. In 1974, he co-founded the Whitaker College at MIT with MIT alumnus Uncas Whitaker '23 and Harvard Medical School professor George Thorn. This program offers joint doctorate programs with the Harvard, Tufts, and Boston University Medical Schools.

Sizer also had a strong commitment to MIT's own research and academic programs. Under his leadership, work in molecular biology at MIT gained worldwide recognition. In 1996, he and his late wife endowed the Helen and Irwin Sizer Career Development Professorship at MIT.

Sizer received several academic distinctions during his long academic career. He was a fellow of the American Academy of Arts and Sciences, and received an honorary doctorate of science from Brown University.

He also had strong research connections outside of the MIT community. He served as a consultant to the National Institutes of Health for several years, was both a trustee and governor of Rutgers University, was a trustee of the Boston Museum of Science. He also served as a consultant to the Ford Foundation and Johnson & Johnson and was a board member of Boston Federal Savings Bank.



BOB SUMNER—THE TECH

The MIT Campus Crusade for Cthulhu held a "ritual and feed" Friday night in the Senior Haus courtyard. The neo-pagan group provides an alternative for students who are not interested in mainstream religious groups.



MBTA builds
Silver Line,
expands bus
service.

Page 28



Comics

Page 18

The Tech presents its new Science section, a review of this past month's biggest breakthroughs.

Page 6

World & Nation 2
Opinion 4
Science 6
Arts 7
Feature 15

WORLD & NATION

Cheney Makes Belated Attack On Gore's Oil Conflict of Interest

THE WASHINGTON POST

SPRINGFIELD, OHIO

As part of his daily attack on the Al Gore, Republican vice presidential nominee Dick Cheney hit Gore where the GOP ticket has been feeling some heat lately: the oil industry.

Cheney summoned reporters Monday to accuse Gore of a "conflict of interest" for supporting an extension of a moratorium on royalties U.S. oil companies would have to pay to drill for natural gas in the Gulf of Mexico when the Gore family trust has holdings in Occidental Petroleum Corp.

He called on the vice president to either recuse himself from administration energy policy or divest the family trust of the holdings, valued at about \$500,000. Cheney said it was "inappropriate for Gore to advocate a position that is clearly linked to Occidental Petroleum's financial health."

Given that Gore stated that position in June, why was Cheney raising it Monday? Because, Cheney told reporters, he got tired of hearing Gore "castigating" oil companies, including this morning on NBC's "Today Show."

Clinton, GOP Agree on Allowing Prescription Drug Imports

THE WASHINGTON POST

WASHINGTON

President Clinton and Republican congressional leaders signaled willingness Monday to move quickly to pass legislation allowing low-price purchase of U.S.-made drugs from abroad, but they remained at odds over more far-reaching proposals to provide prescription drug benefits for elderly Americans.

In a letter to Clinton, House Speaker Dennis Hastert, R-Ill., and Senate Majority Leader Trent Lott, R-Miss., offered to "work with you to find an acceptable version (of the drug reimportation measure) that preserves the safety of our drug supply."

Clinton responded later in the day that he was prepared to sign the Senate-passed version of the legislation which, unlike the House bill, includes provisions for the Food and Drug Administration to track and test the imports. He also said Congress would have to approve \$23 million to fund the FDA safety monitoring.

"I urge you to send me the Senate legislation — with full funding — to let wholesalers and pharmacists bring affordable prescription drugs to the neighborhoods where our seniors live," Clinton, who was traveling in California, said in a letter to the two GOP leaders.

FBI Defends Handling of Lee Case

THE WASHINGTON POST

WASHINGTON

FBI Director Louis J. Freeh plans to vigorously defend the government's handling of the Wen Ho Lee prosecution in testimony Tuesday before Congress, arguing that the case against the scientist remains exceedingly strong despite the tactical decision to enter into a plea bargain with him.

In testimony submitted in advance of Tuesday's special joint session of the Senate Intelligence and Judiciary Committees, Freeh said the government could have proven every allegation against Lee had it taken the case to trial. But national security concerns prompted the plea-bargain decision, for two reasons: to prevent sensitive information about nuclear secrets from being disclosed in open court, and because Lee agreed to explain under oath what he did with roughly 400,000 pages of information he downloaded to portable computer tapes.

"Let me say as emphatically and as forcefully as possible, the FBI and the Department of Justice stand by each and every one of the 59 counts in the indictment of Dr. Lee," Freeh said.

West Tells Milosevic to Step Down After Opposition Win

By Keith B. Richburg

THE WASHINGTON POST

PARIS

Western powers proclaimed an opposition victory Monday in Yugoslavia's Sunday elections and pressed President Slobodan Milosevic to accept his defeat by opposition candidate Vojislav Kostunica.

Although ballot counting is still underway, no official results have been announced and few impartial observers were allowed to witness the process, a flurry of statements from Western capitals claimed that Kostunica had achieved an insurmountable lead and that any attempt by Milosevic to declare victory and remain in power would be considered a fraud.

"It is increasingly apparent that the opposition prevailed and any claims to the contrary by Milosevic are false," White House spokesman Jake Siewert said. "It's clear that the people of Serbia want democratic change and we hope that the government respects their wishes."

"Nothing will be the same as before; something has started that will not stop," said French Foreign Minister Hubert Vedrine, speaking here to reporters on behalf of the European Union. "By no means can

President Slobodan Milosevic declare himself the winner."

From Brighton, England, British Foreign Secretary Robin Cook said: "All the reliable evidence we have suggests the people voted Milosevic out by a massive majority." He added, "Today, Milosevic is a beaten, broken-backed president."

State Department spokesman Richard A. Boucher noted that Milosevic did not permit international observers to monitor the voting. He and other U.S. officials based their claims of an opposition landslide on unofficial tallies provided by opposition observers stationed inside polling places.

Dominique Moisi, a political analyst with the French Institute of International Relations, said the statements declaring an opposition victory were warranted because the Yugoslav government's own count showed the race to be close, which most Western observers say signifies Milosevic actually is far behind. "To be so close, it means the real gap is huge," Moisi said. "...In spite of huge cheating by the government, it was not enough."

The language used by U.S. and European leaders Monday, all but declaring Kostunica the winner,

seemed based mainly on Western leaders' concerted desire to be rid of the man they contend helped plunge the Balkans into three wars, prompting the first intervention by North Atlantic Treaty Organization in a foreign conflict.

The aim of the chorus of statements seems to be to create a climate in which it becomes more difficult for Milosevic to attempt to retain power through rigging, and allows any result that keeps him in place to be discounted.

"The messages are meant to deter Milosevic from resorting to force," Moisi said. "They are saying, if you do remain in power, we know you cheated."

If the main target of Monday's verbal exercise is Milosevic, another seems to be the Yugoslav people, following preelection promises of a lifting of economic sanctions against Belgrade and generous aid to repair damage from last year's NATO bombing.

"A victory for democracy would lead to a radical revision of EU policy," Vedrine said here in Paris. "If Slobodan Milosevic admits his defeat, we Europeans and Americans will respect the commitments we have made."

Record Label Stops Rock Band From Releasing Music on Web

By P.J. Huffstutter

LOS ANGELES TIMES

Citing paralyzing legal pressure, multiplatinum rock band Offspring has bowed to the demands of its record label and has scrapped plans to post an album on the Internet more than a month before the CD goes on sale.

The band's plans had raised the hackles of Sony, the record label that distributes the band's music. Sony and other major record labels are embroiled in legal battles against several online services that allow fans freely to swap music over the Net.

Band officials declined to comment Monday, citing legal restrictions tied to the band's settlement agreement with Sony.

Analysts described the change in the band's plans as an expected move, and warned that the record companies still retain control over the most important weapon in the war over music on the Net — the artists.

"It just goes to show that the record companies still hold most of the cards," said Malcolm MacLachlan, a media e-commerce analyst who tracks online entertainment trends for the research company IDC. "Everyone's talking about these new means of distribution, and how bands won't have to be beholden to the labels. This proves that you can be a pretty successful band, and it's still a better economic bet to go with the record companies."

A Columbia Records executive

said the label was "extremely happy that Sony Music has worked out a solution with The Offspring and its management that supports the integrity of the band's creative idea and enables them to proceed with their promotion."

The online launch, however, will be limited to the posting of only one single, not the entire record. The single download will be available through the band's official site, <http://www.offspring.com>, as well as several other online music sites.

Initially, Offspring, whose members have long supported the controversial online music enterprise Napster Inc., announced two weeks ago that it would post its new record "Conspiracy of One" on the Net on September 29.

WEATHER

Cooler Temperatures Prevail

Greg Lawson
STAFF METEOROLOGIST

Many of the people still wondering where summer went this year will be further disillusioned by this coming week. Yesterday's high was only 60°F (16°C), thanks to a healthy northerly wind associated with a high pressure system passing to our north. As this high passes over the Canadian maritimes, our skies are feeling the influence of a strong storm which has quickly moved northward from the Carolina coast. This storm has brought us rain, strong winds, and temperatures even cooler than yesterday. Fortunately, the storm will move out as quickly as it moved in and the rain should end late tonight, but not before delivering over half an inch of accumulation in some places. With the rain clouds gone, temperatures will try to rise back to their normal levels Wednesday. Though it will reach back into the 60s, a large high pressure system from Canada will plow over us Thursday, bringing temperatures solidly back down into the 50's — overnight temps then could dip into the 30's! It will then be a waiting game for the next upstream low to move in and bring us warmer southern air, whether it be

rain-bearing or not. Don't lose faith though: Indian summers often require an early freeze to get started.

On warmer topics, Hurricane Isaac is roaring off the coast of Africa at category three strength. He is not expected to affect our weather at all. Nor is tropical depression fourteen which has formed in his wake. Both storms serve to remind us that hurricane season extends all the way through the end of November and that, in spite of the current cold spell, anything is still possible in the months to come.

Extended Forecast

Today: Rain with gusty northeasterly winds. Potential for heavy downpours. Chilly high of only 54°F (12°C).

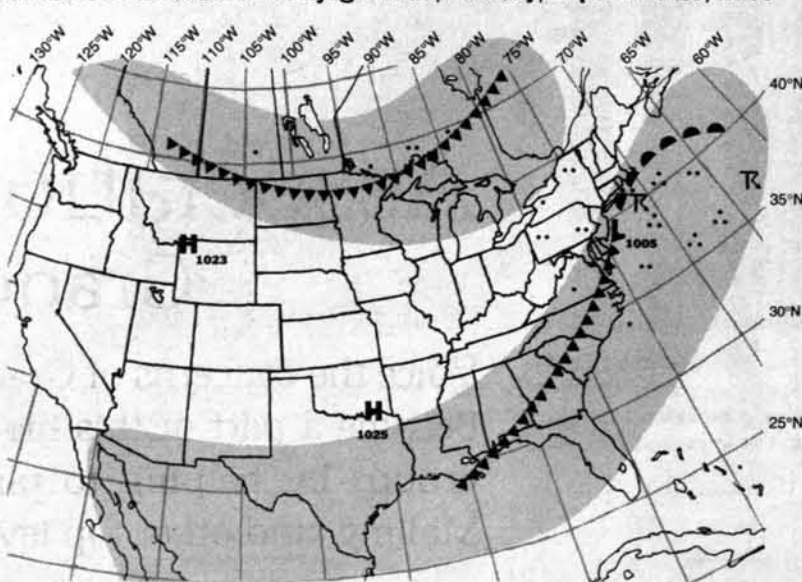
Tonight: Rain letting up late. Winds shifting more westerly. Low of 47°F (8°C).

Wednesday: Skies mostly clearing. Cool and crisp. High of 64°F (18°C). Low of 45°F (7°C).

Thursday: Clear and cool. Northerly winds. High in the mid 50s (12-14°C). Low around 40°F (4-6°C).

Friday: Clouding up and remaining cool.

Situation for Noon Eastern Daylight Time, Tuesday, September 26, 2000



Weather Systems	Weather Fronts	Precipitation Symbols	Other Symbols
H High Pressure	— — — Trough	Snow *	Fog
L Low Pressure	— — — Warm Front	Light *	Thunderstorm
S Hurricane	— — — Cold Front	Moderate **	Haze
	— — — Stationary Front	Heavy ***	

Compiled by MIT
Meteorology Staff
and The Tech

Barak, Arafat Come Together In Attempt to Break Deadlock

By Tracy Wilkinson
LOS ANGELES TIMES

JERUSALEM

Under U.S. pressure and cloak of darkness, Israeli Prime Minister Ehud Barak and Palestinian leader Yasser Arafat met late Monday night for the first time in two months in a bid to break the negotiating deadlock that threatens peace in the Middle East.

It was the first working session the two leaders had held since the ambitious Camp David summit collapsed in late July over seemingly insurmountable disputes involving rival claims to the holy city of Jerusalem, among other issues. Monday's summit came as senior negotiators headed to Washington

for a fresh round of talks.

Arafat, traveling by Israeli military helicopter from his headquarters in the Gaza Strip, joined Barak at his private home in the affluent central Israeli town of Kochav Yair. About 30 Jewish settlers opposed to giving land to the Palestinians demonstrated outside as Arafat arrived.

Both Israeli and Palestinian officials said they hoped the session would diminish the considerable ill will that has grown between the two leaders in recent weeks. In fact, most officials involved spoke more of psychology than real substance.

"Personal contact is very important, and one would hope that (the meeting) can create a better atmos-

phere," Barak's Cabinet secretary, Yitzhak Herzog, said in an interview. "They can explain their positions, clarify their ideas."

Nabil Shaath, a senior Palestinian negotiator, said his expectations of a real breakthrough were low.

"I don't have high hopes," Shaath said, "but I think it's good if it breaks the ice and it gets them to understand each other more and if it somehow produces a favorable environment for serious talk for later, if not tonight."

President Clinton is keen to secure a peace deal before he leaves office. Time is also short for Barak, who faces a mutinous Parliament that could throw him out of office when it reconvenes next month.

More Than 100 Rebels Die In Philippine Hostage Situation

THE WASHINGTON POST

MANILA, PHILIPPINES

Philippine officials said Monday that government soldiers have killed more than 100 Muslim guerrillas in their 10-day assault on the remote southern island of Jolo, and are steadily closing on rebel leaders holding American Jeffery Schilling.

But as it drags into its second week — lapsing beyond the government's initial one-week timetable — Manila's high-profile siege on the tiny jungle island can boast few other tangible accomplishments.

The campaign has resulted in the death of one government soldier, dislocated nearly 40,000 civilians and may be costing Manila's already debt-ridden treasury as much as \$1 million a day.

Government troops are said to have seriously wounded a top rebel leader in a firefight last week. But all five main leaders of Abu Sayyaf, the Muslim guerrilla group targeted by the operation, remain at large. And since the escape last week of two French hostages, who dashed to freedom themselves as the rebels fled through the jungle, Manila's high-profile military blitz has failed to secure the release any of the rebels' remaining 17 hostages.

Many analysts warn the campaign also is rekindling centuries' old religious and ethnic antagonisms between the Philippines' Roman Catholic majority and the estimated 7 million Muslims concentrated on the archipelago's southern islands.

Cost of Employer-Sponsored Health Insurance to Increase

THE WASHINGTON POST

WASHINGTON

Many workers and retirees who depend on employer-sponsored health insurance are likely to face significant premium increases in the near future, and some small employers might stop offering coverage, according to a report by a national health care foundation and interviews with company managers across the country.

The anticipated premium hikes come in addition to an average increase of 8.3 percent this year, and both are driven largely by higher costs for prescription drugs, according to a Kaiser Family Foundation report, the latest analysis to document rising health-care costs.

The report, based on a survey of 3,402 employers nationwide, predicted premiums will continue to go up and "employers may respond to the rising cost of health insurance (by passing) some portion of the increased cost on to employees."

In interviews, managers in companies large and small — as well as health insurance analysts — said many workers can expect to pay even bigger percentages in the future, especially if the economy weakens.

For some people this means that making ends meet in coming years is likely to get tougher.

Gore Expands Medicare Proposal To Cover Preventive Health Care

By James Gerstenzang
LOS ANGELES TIMES

ST. PETERSBURG, FLA.

Vice President Al Gore expanded his plan to revamp Medicare on Monday, proposing new coverage for preventive health care and penalties for health maintenance organizations that reduce their Medicare work.

Gore said the presidential election six weeks from now will come down to a choice over which candidate "stands up and fights for the seniors who need health care."

The Gore campaign is hoping that differences over health care with Gov. George W. Bush of Texas, the Republican presidential nominee, will prove a powerful

incentive for undecided voters to move to Gore's side.

That is particularly so in Florida, which has 25 electoral votes, the largest percentage of elderly voters of any state and a race that is up for grabs.

Gore, campaigning with his wife, Tipper, unveiled new details of his Medicare program in a speech at The Coliseum — an art Deco hall once the center of social and civic life in St. Petersburg — and in a 74-page booklet he issued Monday, "Medicare at a Crossroads."

The vice president has long been pressing his differences with Bush over Medicare, which serves 40 million Americans, and the program he presented Monday builds on earlier

proposals to extend the Medicare trust fund's solvency from 2025 to 2030 and make prescription drug benefits available to all beneficiaries.

On Monday, Gore proposed eliminating most deductibles and co-payments for Medicare's preventive services. Thus, beneficiaries would not have to pay separate fees for various screenings, among them those for prostate and colon cancer. Under current regulations Medicare charges a \$100 deductible and, for preventive care, a 20 percent co-payment.

In addition, the vice president would make such tests available under Medicare at rates recommended by health experts.

Graduate Student Council

GET INVOLVED THROUGH THESE EXCITING OPPORTUNITIES:

Spring Weekend Committee

Calling for students interested in planning the largest event of the Spring semester!

Bring your talents to work together with a variety of Graduate and Undergraduate groups to make this year's event and even bigger success.

Association of Student Activities Graduate Member at Large

Voice the concerns of Graduate Student Activities across the Institute.

Become a part of this highly visible organization devoted to supporting student groups by helping to plan the annual Activities Midway, First Year Summer Mailing, and other top level projects.

Your chance to make a difference — steer important decisions!

Applications Available in the GSC Office, Walker Memorial Room 220 or at <http://web.mit.edu/gsc>

For more complete information visit the website or contact gsc-vice-president@mit.edu

OPINION

Pass/NR Not the Only Problem

Undoubtedly, many students and faculty are now considering the recommendation from a Committee on the Undergraduate Program subcommittee to abolish the Pass/No Record grading system during the spring term of freshman year. But we believe that it is myopic to focus solely on the

Editorial

freshman grading system without evaluating the rest of the freshman experience at the Institute. It is time that MIT consider making several fundamental changes to freshman advising and course selection to accompany the coming change in grading policy.

The Tech believes that freshmen should hold two academic goals for their first year at MIT. First, they should explore those majors which interest them, learn about the offerings and opportunities of different departments, and make an educated choice of major. Second, they should strive to complete their coursework to the best of their ability. Reducing Pass/No Record to one semester may discourage slacking among the freshmen, but it does nothing to encourage freshmen who have not yet chosen their major to sample classes from different courses.

The greatest flaw in MIT's freshman program is its woeful advising system. Too many advisers show too little interest in a student's personal desires and instead push students to fill freshman year solely with required courses such as 5.11 and 7.012, which may have no relevance to a student's major. *The Tech* sees no reason why students who are inclined to take a course such as 6.001 freshman year, and who have completed the prerequisites, should not be able to do so. Advisers must be instructed that students should be encouraged to sample MIT's varied course offerings their first year and not be trapped into a rigid, inflexible schedule of basic requirements. While many in

the administration and student government have long argued that advisers must be more than MIT employees who sign registration forms for students, the reality is that today's advisers are just that.

The interaction between MIT freshmen and professors must also be improved from its current sorry status for MIT's freshman program to be successful. There is a dangerous disconnect between the faculty and freshmen which harms the freshman experience. Professors active in the lives of freshmen can be encouraging mentors, exciting students about research and classes, and, in turn, the Institute as a whole. Unfortunately, the current wall of separation between freshmen and their professors prevents this from happening.

One potential idea which may foster exploration of different majors, and make a wider variety of classes more available to freshmen, is to designate one course in each major as a freshman introductory class, and allow freshmen to take that class on Pass/No Record their spring semester. This system would allow first-year students to explore different majors in a less-pressured environment, while ensuring that freshmen choosing to take more advanced classes in their spring semester must do so on grades. The CUP should either consider this proposal, or create a similar structure, to guarantee that freshmen who feel the need to explore different majors may do so their freshman year.

As the proposal to eliminate spring Pass/No Record grades comes before the CUP, committee members must acknowledge more serious flaws that exist in the freshman program and attempt to correct these. Before acting on grades, the CUP must correct the major flaws in the advising system, and ensure opportunities for freshmen to learn about different majors.



Chairman

Satwksai Seshasai '01

Editor in Chief

Naveen Sunkavally '01

Business Manager

Jasmine Richards '02

Managing Editor

Ryan Ochylski '01

Executive Editor

Gregory F. Kuhn '00

NEWS STAFF

Director: Dana Levine '02; **Editors:** Laura McGrath Moulton '01, Rima Arnaout '02, Mike Hall '03; **Associate Editors:** Sanjay Basu '02, Matthew Palmer '03; **Staff:** Frank Dabek G, Daniel C. Stevenson G, Kevin R. Lang '02, Karen E. Robinson '02, Efrén Gutierrez '03, Pey-Hua Hwang '04, Jennifer Krishnan '04, Brian Loux '04, Shankar Mukherji '04, Jennifer Young '04; **Meteorologists:** Véronique Bugnion G, Rob Korby G, Peter Huybers G, Greg Lawson G, Bill Ramstrom G.

PRODUCTION STAFF

Editors: Mary Obelnicki G, Eric J. Cholaneril '02, Ian Lai '02, Jordan Rubin '02; **Associate Editor:** Stacia Swanson '03; **Staff:** Joy Forsythe '04, Andy Leiserson '04, Eric Tung '04.

OPINION STAFF

Editors: Eric J. Plosky '99, Michael J. Ring '01; **Associate Editor:** Kris Schnee '02; **Columnist:** Veena Thomas '02; **Staff:** Matthew L. McGann '00, Michael Borucke '01, Philippe C. Larochelle '03, Roy Esaki '04.

SPORTS STAFF

Associate Editors: Jeffrey Colton '02, Brian K. Richter '02; **Staff:** Alvan Eric P. Loreto '01, Jennifer C. Lee '03.

ARTS STAFF

Editors: Rebecca Loh '01, Annie S. Choi; **Associate Editor:** Fred Choi '02; **Staff:** Erik Blankinship G, Karen Feigenbaum G, Bence P. Olveczky G, Roy Rodenstein G, Vladimir V. Zelevinsky '95, Zarminae Ansari '97, Lianne Habinek '02, Jumaane Jeffries '02, Jacob Beniflah '03, Daniel J. Katz '03, Amy Meadows '03, Ryan Klimczak '04.

PHOTOGRAPHY STAFF

Editor: James Camp G; **Associate Editor:** Nathan Collins G; **Staff:** Erika Brown G, Krzysztof Gajos G, Sephir Hamilton G, Garry Maskaly G, Karlene R. Maskaly G, Wan Yusof Wan Morshidi G, Michelle Povinelli G, Bob Sumner G, Samudra Vijay G, T. Luke Young G, Nii Dodoo '01, Ying Lee '01, James Snyder '01, Minnan Xu '01, Yi Xie '02, Roshan Baliga '03, Leonid Drozhinin '03, Wendy Gu '03, Pedro L. Arrechea '04.

FEATURES STAFF

Editor: Katie Jeffreys '01; **Associate Editor:** Aaron D. Mihalik '02; **Cartoonists:** Aaron Isaksen G, Solar Olugebefola G, Jennifer Dimase '01, Bao-Yi Chang '02, David Ngo '02, Baris Yüksel '02, Lara Kirkham '03, Alison Wong '03, Guan-Jong Chen '04; **Staff:** Katherine H. Allen '03, Bushra B. Makiya '03, Sonali Mukherjee '03.

BUSINESS STAFF

Advertising Manager: Huanne T. Thomas '02; **Operations Manager:** Erica S. Pfister '00; **Staff:** Rachael Johnson '02, Kiwah Kendrick '02, Dashonn Graves '03, Kedra Newsom '03, Joey Plum '03.

TECHNOLOGY STAFF

Staff: Chris McEniry G, Shantonu Sen '02.

EDITORS AT LARGE

Contributing Editors: Brett Altschul G, Gábor Csányi G.

ADVISORY BOARD

Paul E. Schindler, Jr. '74, V. Michael Bove '83, Barry Surman '84, Robert E. Malchman '85, Thomas T. Huang '86, Simson Garfinkel '87, Jonathan Richmond PhD '91, Josh Hartmann '93, Jeremy Hylton '94, Thomas R. Karlo '97, Saul Blumenthal '98, Indranath Neogy '98, Joel Rosenberg '99, B. D. Colen.

PRODUCTION STAFF FOR THIS ISSUE

Night Editors: Mary Obelnicki G, Ian Lai '02; **Associate Editor:** Stacia Swanson '03; **Staff:** Ryan Ochylski '01, Eric Tung '04, Joy Forsythe '04.

The Tech (ISSN 0148-9607) is published on Tuesdays and Fridays during the academic year (except during MIT vacations), Wednesdays during January and monthly during the summer for \$45.00 per year Third Class by The Tech Room W20-483, 84 Massachusetts Ave., Cambridge, Mass. 02139. Third Class postage paid at Boston, Mass. Permit No. 1. POSTMASTER: Please send all address changes to our mailing address: The Tech, P.O. Box 397029, Cambridge, Mass. 02139-7029. Telephone: (617) 253-1541, editorial: (617) 253-8324, business: (617) 253-8226. Facsimile: Advertising, subscriptions, and reprinting rates available. Future contents © 2000 The Tech. Printed on recycled paper by Charles River Publishing.



Opinion Policy

Editorials are the official opinion of *The Tech*. They are written by the editorial board, which consists of the chairman, editor in chief, managing editor, news editors, and opinion editors.

Dissents are the opinions of the signed members of the editorial board choosing to publish their disagreement with the editorial.

Columns and editorial cartoons are written by individuals and represent the opinion of the author, not necessarily that of the newspaper.

Letters to the editor are welcome. Electronic submissions are encouraged and may be sent to letters@the-tech.mit.edu. Hard copy submissions may be addressed to *The Tech*, P.O. Box 397029, Cambridge, Mass. 02139-7029, or sent by interdepartmental mail to Room W20-483. All submissions are due by 4:30 p.m. two days before the date of publication.

Letters and cartoons must bear the authors' signatures, addresses, and phone numbers. Unsigned letters will not be accepted. No letter or cartoon will be printed anonymously without the express prior approval of *The Tech*. *The Tech* reserves the right to edit or condense letters; shorter letters will be given higher priority. Once submitted, all letters become property of *The Tech*, and will not be returned. *The Tech* makes no commitment to publish all the letters received.

To Reach Us

The Tech's telephone number is (617) 253-1541. E-mail is the easiest way to reach any member of our staff. If you are unsure who to contact, send mail to general@the-tech.mit.edu, and it will be directed to the appropriate person. *The Tech* can be found on the World-Wide Web at <http://the-tech.mit.edu>.

A Showering Solution

Burton-Conner Policy a Reasonable Compromise

Veena Thomas

Freshman shower night, traditionally the evening before the first 8.01 exam, is one of those vaunted MIT traditions passed down through the years. On the night in question, upperclassmen throw freshmen, kicking and screaming, into a waiting shower. Upon emerging, drenched, the freshmen attempt to retaliate against the upperclassmen by forcing them into the shower. In the end, some are happy, some are miserable, and everyone ends up wet and cold.

Like many of those other vaunted traditions held in such high esteem by MIT students, shower night has fallen under criticism by the administration. Refreshingly, however, the criticism came as an attempt to curtail a truly dangerous situation before it happens. Burton-Conner Housemaster Halston Taylor sent an e-mail to Burton-Conner residents, Dean of Student Life Larry Benedict, and others, explaining that no longer would he permit the level of property destruction and violence that has occurred in Burton-Conner in previous years.

Much of the problem stems from an inability to restrict the activity to inside the showers. Some dorms, particularly Burton-Conner, extend the showering into "rivering." In effect bringing the shower to those who resist, upperclassmen drench protesting freshmen with a very large bucket of water. Since rivering in the bathrooms would be pointless, it always occurs in an area inadequately prepared for dealing with water, such as the lounges, hallways, or dorm rooms. Burton-Conner has reportedly suffered thousands of dollars in damage from such practices, particularly in recent years. In addition, escalating levels of injuries made it clear that some action needed to be taken shortly.

No doubt afraid that this year's situation would worsen, Taylor met with the Dean's Office to draw up a policy modification for shower night. What makes Taylor's actions and the policy so impressive is his desire to maintain the spirit of shower night, while making it safer and nondestructive. Unlike other policies drafted with no regard as to the students, the regulations for shower night retain the fundamental elements of the night — the policy still allows showering — while banning the excessiveness of recent years. The Burton-Conner ExecComm approved the policy for Burton-Conner the evening before

shower night, perhaps convincing Larry Benedict to avoid taking immediate action, such as banning shower night altogether, and leave it to individual dorms to police themselves. Currently, no campus-wide policy for shower night exists.

I've personally never been one for shower night. Freshman year I was genuinely scared — "You're going to *what* with me? Because I'm a freshman?" I could only imagine all thirty residents of my floor bribing one of my roommates to let them into my room, and then storming in to haul me away from my problem set, dragging me down the hallway, before hurling me into the shower. I was sure I would emerge broken-boned, bloodied, and embarrassed to tell my parents what had happened to me. Me, get showered? No way. I promptly added my name to the "Do Not Shower" list my GRT kindly provided, with the promise that those people on the list would not be permitted to be showered. Confident that I would escape unharmed, I then went to hang out with my friends in another dorm.

I mistakenly believed that each hall was only interested in showering its own residents. However, when the burly upperclassman guys came knocking on the door, I realized that they were after any freshman in the vicinity, regardless of official address. My freshman friends, all guys, didn't really mind being showered, though they put up a fight anyway. Luckily they understood my reluctance to be thrown in the shower, and they hid me in the closet, claiming to the showerers that they were unaware of my whereabouts. Huddled in the closet, terrified someone would find me as they searched the room, and listening to the screams down the hall, I wondered why there wasn't a better system of protecting students.

I understand that shower night is a way for everyone to blow off some steam and relieve the stress of the term. However, I do not believe shower night as it stands is the best method. Some people genuinely do not mind being showered, and for those people, shower night should continue. Yet there are many who loathe the idea of being showered, and MIT policy should protect them.

Misuse of shower night can be a very real possibility. Women wonder if guys throw them into the shower simply to see them in a wet T-shirt. Shower night can be a display of dominance, as upperclassmen show the freshmen who's in charge. Often a display can be taken to an extreme. As a barely-five-foot tall woman, there's something really sick and dis-

turbing to me about the thought of a bunch of huge guys physically grabbing me and forcefully throwing me into the shower. Anyone who takes pleasure in ganging up on someone half his or her size, especially a group of guys preying on one girl, should be ashamed of themselves.

For some, shower night is simply a night of good clean fun, a tradition to be celebrated. I will not attempt to convert my personal dislike of shower night into a blanket ban for all. This is why I admire the new Burton-Conner policy — it protects everyone from unwanted showering by requiring the express permission of anyone prior to showering. While this may seem odd — a group of upperclassmen knocking on freshmen's doors asking politely, "Can we shower you?" — there's an easy solution. Like my floor does every year, post a "Do Not Shower" list in the hallway. People who have added their names to the list are not allowed to be showered.

Everyone not on the list is assumed to have given their implicit permission to be showered. This avoids the confusion present in the midst of showering — does someone screaming really not want to be showered, or are they just playing along? Freshmen not on the list can try to scheme to outsmart the upperclassmen and avoid being showered, while not minding if they actually are showered. It's all part of the game.

The removal of extreme actions like rivering or drenching other living groups from Burton-Conner's shower night serves to reinforce, rather than weaken, the tradition. Everyone can have fun while knowing they will remain safe and protected from undue harm. In addition, restricting showering to the bathrooms allows everyone to live in a clean, dry environment free of water damage, and prevents a living group from being destroyed by outsiders. Is anyone really in favor of vast property damage?

Therefore, I urge the administration to seriously consider adopting a campus-wide Burton-Conner-style policy regarding shower night. Halston Taylor admirably decided to protect his dorm residents proactively from a night whose hazing nature is questionable, while still allowing its spirit to continue. The restrictions made are certainly reasonable — and hopefully will be sufficient to prevent a ban of shower night altogether. Perhaps the action of drafting a sensible policy to prevent serious problems before they occur will set a precedent for others to follow.

Lessons From Bobby Knight

Guest Column
Philip Burrowes

Indiana University's basketball website used to describe Bob Knight as "the name synonymous with greatness and winning The numbers and achievements prove what he has done."

Indeed, Coach Knight had the most wins of any active basketball coach, coached gold medal-winning Olympic and Pan American Games basketball teams, and almost became an institution unto himself at IU. It was this coaching record which brought students in droves to support Knight when he was dismissed from the University two weeks ago.

Coach Knight, however, also had a name synonymous with recalcitrance, biliousness, and an overall irascibility with players and officials alike. It was this coaching record which prompted the University's board of trustees to place him under a "zero tolerance" policy in May, and ultimately led to his dismissal. Although his firing was based more on relationship with administrators than job performance, I must side with the board on their decision.

To begin with, Knight was not a teacher in any vocational sense of the word. It is true that many of his players have gone on to professional basketball, but IU is in no way dedicated to producing professional basketball players. In fact, the cause of the professional basketball player — to make a living — is completely antagonistic to that of a participant in the NCAA (appropriately or not). Knight, instead, was the administrator of an extracurricular program instituted to instill pride in the University. His job was to lead a team which fostered a more positive image of IU. Very few people will contend that the teams he coached did not do that. What he did not do was make the administration feel like he was beholden to them. But as an employee, and especially as an employee who was not integral to the purpose of the University he most certainly was beholden.

It was the contention of those members of the student body in support of Knight, however, that he was not so nearly as subservient as the board of trustees would have him out to be. "I think the 'zero tolerance' policy they put on him doesn't allow him to be a basketball coach," said one recent IU graduate.

In essence, many students felt Knight needed — and deserved — a degree of sovereignty from IU which he was not being given. His recruitment, his coaching strategy and other elements of his basketball program itself, however, were never threatened; his off-the-court behavior has been cited far more than his on-court antics (to be fair, Knight himself said he was unsure if the "zero tolerance" pertained to such matters as a technical foul).

More disturbing about the students' viewpoint than their misconception of the nature of their school is their sublimation of any blame from Knight himself. Many have blamed University president Myles Brand for making a completely misguided decision. A freshman who brought a complaint against Knight directly before his dismissal has been the target of several death threats. While not all students, perhaps not even a majority, hold these positions, very vocal groups have been presenting a conception of an administration completely out of touch with the needs of the students. It appears to me that the students themselves are not truly aware of what their life at IU should entail.

I cannot say I have a purely objective view of college life which leaves me better able to discern the situations than these members of the IU student body. Perhaps years of schooling where academics were stressed — often to the detriment of the student-athlete — has rendered me unable to understand the true effect of a successful athletics program.

Both my high school and MIT, however, excel at largely peripheral sports, where it often seems that athletes' participation is more important to themselves than the student body in general. Success, then, does not precipitate importance. What was it about Coach Knight and IU that created such an importance? More importantly, is it something any institution of higher learning should condone, let alone encourage?

Philip Burrowes is a member of the Class of 2004.

Religion and Politics — A Dangerous Mix

Michael Borucke

Why has religion become such an important campaign issue all of a sudden? Is it because the presidential race is so boring and devoid of real meaning that the political analysts needed some controversy? It certainly hasn't been an issue upon which to differentiate between the two major party candidates. George W. Bush's support for prayer before high school football games garnered a lot of media attention, as have Joe Lieberman's recent speeches about his faith. Yes, with three Christians and a Jew who believes that Jesus inspired the idiom "all men are created equal," the Republicans are unified in yet another campaign issue.

But what are presidential candidates talking about religion for? I thought the amendments guaranteeing the separation of church and state put an end to the legal debate. There shouldn't be any point of contention. Isn't it fairly obvious that public schools shouldn't be hanging the Ten Commandments on the walls, or leading prayer at a football game? For goodness sake, move on already.

Actually, the parallels between American religion and American politics are quite interesting. The leaders, male in both cases (one because of dogma, the other because of oppression) stand behind a podium in front of an audience "preaching" that belief in religion/capitalism is all that is required to be saved/democratic. They say things that make people feel good: the country is the most advanced society in history, theirs is the one true religion. But a look at the inherent contradictions in either case (the increasing wealth gap/biblical inconsistencies) tend to discredit their entire basis. Still people are glad to listen; perfectly willing to ignore their naked emperor when contradictions dictate they must. All the while there is absolutely no assurance that these leaders believe in what they are saying themselves.

Of course, I don't seem to hold the majority view — the public evidently wants to hear about God in politics. According to a Newsweek poll, more than 60 percent of voters believe that it is appropriate for politicians to talk about their religious beliefs. Personally, I can't believe such a percentage of Americans still consider religion at the ballot box. But the religious drivel continues to be spewed forth by both main party candidates and it continues to be caught and displayed unflinchingly by the mainstream press. So it goes.

But there are some serious disadvantages to all this religious electioneering. Any reasonable look at history will show that the amount of political bible-thumping done by politicians shows little positive correlation to any trait we would like to attribute to a religious person such as compassion, reason, or morality. So will the next administration be any different? Do they really believe in what they say or is it lip service? Just ask yourself if you think Bush or Gore would think twice about speaking about being "saved" if polls showed it would be in their interest to do so. The deception doesn't have to stop once the election is finished.

Imagine a president in time of war, responsible for the deaths of millions, going on television to speak to the American public, "My fellow Americans ... and so, with God's help we can bring an end to this horrible war." This rhetoric is typical, and it allows people to believe the president is working trying to bring an end to the war. You would hope he wouldn't invoke the name of God if he weren't. Religion then gives a quick answer, there is some Judeo-Christian ethic at work and nothing more needs be said. No need to look at the monied interests at work in the equation, no need to do anything about the issue ourselves; it's up to God and the president now.

This brings up another interesting parallel: absolute and utter adherence to both the party

line and religious dogma. Besides prayer, what other activity is repeated so many times in America that it has become ritual? Of course, pledging allegiance to the U.S. of A. Done before every single sporting event, implicit in every Fourth of July parade, pledging allegiance has had the effect of making anyone critical of the government an evil, disrespectful, ungrateful, unpatriotic son of a bitch. Just as some can't fathom being a good person without believing in God, some can't believe it is possible to love a country while simultaneously being critical of the government or its symbols.

Taking all this into consideration, it would seem that Jesus Christ would not make a very good president. He wasn't the most patriotic messiah of his time: if you recall, he was condemned to death for fear that he would lead the people in revolt against the Roman government. In addition, his propensity for feeding the hungry, clothing the poor, and healing the sick would probably win him the communist label rather than either the Democrat or Republican nomination. This begs the question of whether Gore or Bush can successfully reconcile their capitalist politics with their religious beliefs in a raging commie.

Maybe the appeal is not precisely what politicians are saying but simply that they are saying it. I can understand a citizen's desire to have their representative share in his or her beliefs; especially in one as sacred as religion. Voters want to feel that the moral values they try to live by are the same values running the country. However, I cannot understand why the public has allowed religion to take up such a large portion of the campaign spotlight this year. Besides allowing the candidates to avoid more tangible issues like defense spending or education, religious politicking will insure that the next president will be the one to have appeared the most devout. But I don't want to rely on faith when choosing a leader and I certainly don't want to choose a candidate I have no faith in.

SCIENCE

Peptides Prove Useful as Nanobuilders

There are two ways to build an object: carve it from a singular block of material or build it from its many parts.

Traditionally, electronic circuits are created using the former method. Flat sheets of silicon with dopant atoms are cut into sandwich-like pieces and carved into useful structures. Researchers now are working to further miniaturize the assembly process by using "nanocrystals" of semi-conducting materials to build circuits.

Nanocrystals are small items, only a few nanometers across. This makes them several times smaller than the transistors in regular integrated circuits.

Nanocrystals can then plausibly be used as switching mechanisms or memory elements. The small crystals are organized by metal-binding peptides. Cells move materials on the same small scale as the nanocrystals. Nature is used to working with organic-based compounds, and is not adapted to semiconductor materials.

Previous research done at the University of Copenhagen revealed that proteins have chemical groups that bond to certain metals. Scientists found peptides that have the right molecular structure to fit on the surface atoms of the metals.

At the University of Texas at Austin, Angela Belcher and other researchers have found the analog of the peptides and metals for semi-conducting materials. After 5 rounds of trials of running different peptides chemically linked to protein coats of colphage they discovered which phage particles were capable of sticking to the metals, and from that were able to isolate the useful peptides.

—Catherine Shaw

Surgical Accident Sparks Innovation

Had the surgery turned out differently, it is very possible that Professor Ernesto Blanco of the Mechanical Engineering Department would still have been interested in the surgical instruments. As it turned out, the surgery gone awry guaranteed that Blanco would modify the instrument at fault. The trocar is used in endoscopic, minimally invasive surgery to make the initial puncture through skin. Once a hole has been made, other instruments can be inserted within the puncture and used to complete the surgery.

In Blanco's surgery, the trocar cut too deep due to the change in resistance once the skin had been pierced. Because the endoscopic surgery had to be truncated after the slip of the trocar, Blanco needed an open surgery. This resulted in a longer hospital stay, stitches (which incidentally inspired

another invention) and an increased risk of infection.

The trocar Blanco has designed should, however, be able to sidestep these problems by addressing the initial difficulty of piercing the skin without injuring organs. The new design is shaped in an hollow X rather than the traditional solid V. The new design always has a protective guard on the blade within the body, a major improvement on trocars that can plunge 3/4 of an inch in the body before the safety guard is deployed.

In addition, the new trocar removes a step in endoscopic surgeries by filling the body cavity with carbon dioxide in order to separate organs from the abdominal walls. A patent has been applied for the device, which will take approximately a year to arrive on the market.

—Jane Maduram

Scientists Explain Declining Immune Response in AIDS Patients

Victor Appay of the Institute of Molecular Medicine at the John Radcliffe Hospital in Oxford, UK, and his colleagues explain in the *Journal of Experimental Medicine* that certain anti-viral "killer T cells" in people infected with HIV lose their sting over time.

CD8 T lymphocytes, commonly called "killer T cells," are part of the body's front-line of defense. They kill virus-infected cells and produce anti-viral proteins that interfere with virus multiplication. In CD8 T cells that recognize HIV antigens and attack HIV-infected

cells, HIV hinders the former function.

In patients who have the virus but have yet to develop AIDS, CD8 T lymphocytes produce small amounts of perforin, a protein that leads to the death of an infected cell. The CD8 T lymphocytes continue to release normal amounts of cytokine proteins, which help kill the virus directly.

To fully mature, CD8 T cells need the help of CD4 T cells. However, HIV directly infects and switches off CD4 cells. Their gradual loss brings on the severely immunodeficient state

of AIDS. It is theorized that the disappearance of CD4 T cells also strands the HIV-responsive CD8 T cells at an immature stage of development. The stunted CD8 T cells continue to produce anti-viral proteins, however.

For years, scientists have wondered why the immune systems of HIV-infected patients hold the virus in check for years without eradicating it completely. These findings may help explain what happens during this silent period of chronic HIV infection.

—Paiyart Kanjanavakoon

Team Tests 150-ton Magnet In Japan

MIT engineers and colleagues from Japan and the United States reported that a 150-ton magnet, significant to fusion energy research, has passed its initial operating test.

The magnet, located in Japan, produced a magnetic field 260 times more powerful than that of the Earth, at 13 tesla, with a stored energy of 640 megajoules at a current of 46,000 amperes.

Two modules make up the magnet: one designed and built in the United States, the other in Japan. Dr. Raghavan Jayakumar, a visiting scientist at MIT, spearheaded the U.S. magnet program. The magnet was built by engineers from MIT, Lawrence Livermore National Laboratory (LLNL) and the Lockheed Martin Corporation, the prime industrial contractor. The two modules were combined last year in Naka, Japan.

Joseph V. Minervini, principal researcher at MIT's Plasma Science and Fusion Center (PSFC) and Department of Nuclear Engineering, said, "It's the world's most powerful pulsed superconducting magnet." The researchers seek to demonstrate "superconducting performance parameters" and manufacturing methods for larger magnets planned for the International Thermonuclear Experimental Reactor (ITER), whose goals include demonstrating the feasibility of nuclear fusion as an energy source.

Perhaps the most noteworthy result of the initial testing was the stability demonstrated by the magnet while charging to full capacity. No training or quenching was required, common procedures in the early operation of other superconductors.

According to the researchers, future testing will involve trying to increase the speed at which they can charge up to 13 tesla and discharge.

—Georgia Pangiotakis

Unexpected Bacterial Similarities May Lead to Vaccine

In the March 31 issue of *Science*, researchers from MIT and the Louisiana State University Health Sciences Center report finding surprising similarities between two bacteria with widely differing lifestyles in how they establish chronic infections in mammals and plants. Upon first glance, agriculturally important bacterium *Rhizobium meliloti* and pathogen *Brucella abortus* have no features in common. However, Graham Walker, professor of biology at MIT, reports that both bacteria interact with their hosts similarly.

While all organisms require nitrogen, plants cannot utilize it until it has been converted into ammonia. This conversion is accomplished by leguminous plants with the help of rhizobia, bacteria residing in the soil. The bacteria invade the nodules on the roots of the plants and are then taken up by the plants. "You can look at it as a chronic infection of the plant, although unlike other infections, this is beneficial to the organism," Walker said. "The plant allows itself to be invaded by the bacteria. In this way the plant gets ammonia and the bacteria gets carbon."

On the other hand, *Brucella abortus* infects mammals by being ingested in the form of infected milk or animal tissue, resulting in brucellosis, a debilitating disease accompanied by symptoms that include fever, malaise, and weight loss. The disease is difficult to eradicate because the bacteria reside inside human cells. According to MIT postdoctoral fellow Kristin Levier, the bacterial gene *bacA* is crucial to both the rhizobia and the mammalian pathogen *Brucella abortus*. "The *bacA* function seems to be necessary for the bacteria to overcome the defense response of the host that would otherwise prevent a chronic infection," said Walker, as removal of the *bacA* gene made it impossible for the bacteria to infect its host.

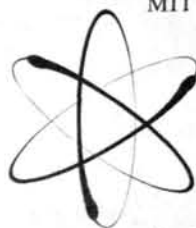
Thus, this scenario, which involves removing the *bacA* gene from the bacteria to allow the human immune system to recognize and kill the intruder, is a perfect starting point for the development of a vaccine against brucellosis.

—Georgia Pangiotakis

Information released by MIT News Office.

Nuclear Containers May Dissolve

As the use of nuclear fuel skyrockets around the world, a team of MIT scientists led by Civil and Environmental Engineering Professor Franz-Josef Ulm has been asking a simple question: where is the waste going to go? Ulm and others have raised concerns about the ability of cement containers



to hold nuclear waste over the long term.

But rather than watch potentially bad environmental policy take shape, Ulm and his colleagues took action by designing a test that allows them to observe in one day what weathering conditions nuclear waste containers will be exposed to over the next 300 years. Using a laboratory model based on miniaturized concrete slabs surrounded by a liquid bath, Ulm and his colleagues began to subject weathered materials to a variety of stresses and conditions to discover how the containers could be improved.

"Our goal is to go back to real-life structures, monitor the environment around them, and predict by model-based simulation what

the concrete will do over extended periods of time," Ulm said. And if a bad scenario plays out, "we'll be able to predict its eventual effect, and intervene in time to slow down or reverse the aging," Ulm said.

Ulm is now attempting to export his model to those who need it most: the U.S. government. "When, and if, spent nuclear fuel from the U.S. is buried in the Department of Energy proposed repository at Yucca Mountain, it will be placed in concrete casks that are supposed to maintain integrity at least 300 to 1,000 years," said Mujid Kazimi, an MIT professor of nuclear engineering. But what Ulm and others are finding is that the concrete containers can weaken over time, causing the concrete to dissolve. When Ulm applied a shear stress to his laboratory containers, slivers of the material slipped apart.

"So a material that is originally very strong ultimately ages to one that behaves like a weak low-friction soil, such as clay," Ulm concluded. The findings may lead to a renewed emphasis to discover how the waste containers can be improved.

—Sanjay Basu

Information provided by MIT News Office.

Write Science for *The Tech*!

The briefs in this section have been produced in a joint arrangement between the MIT Undergraduate Research Journal and *The Tech*. For more information on writing for this section, contact Catherine I. Shaw, editor of the Science section, at cishaw@mit.edu, or e-mail join@the-tech.mit.edu.

THE ARTS

CONCERT REVIEW

Fuel

On Fire

By Chaitra Chandrasekhar
and Rachana Oza

Hot on the heels of their platinum debut album, *Sunburn*, rock band Fuel (Brett Scallions, lead vocals, guitar; Carl Bell, guitar, vocals, primary songwriter; Jeff Abercrombie, bass; Kevin Miller, drums) is climbing the charts in the alternative rock scene with their new release, *Something Like Human*, which arrived in stores on September 19. The first single from the album, "Hemorrhage (In My Hands)," is blowing up airwaves nationwide.

The band came from Western Tennessee, where Bell and bassist Abercrombie played in several bands together. The group formed under the name Fuel with the arrival of Scallions, another veteran of the Tennessee scene. After selling 5,000 copies of their eight-song demo at their shows, the group moved to Harrisburg, a strategic location. Their big break came with their first major-release album *Sunburn*, and *Something Like Human* appears to be following up its predecessor's success.

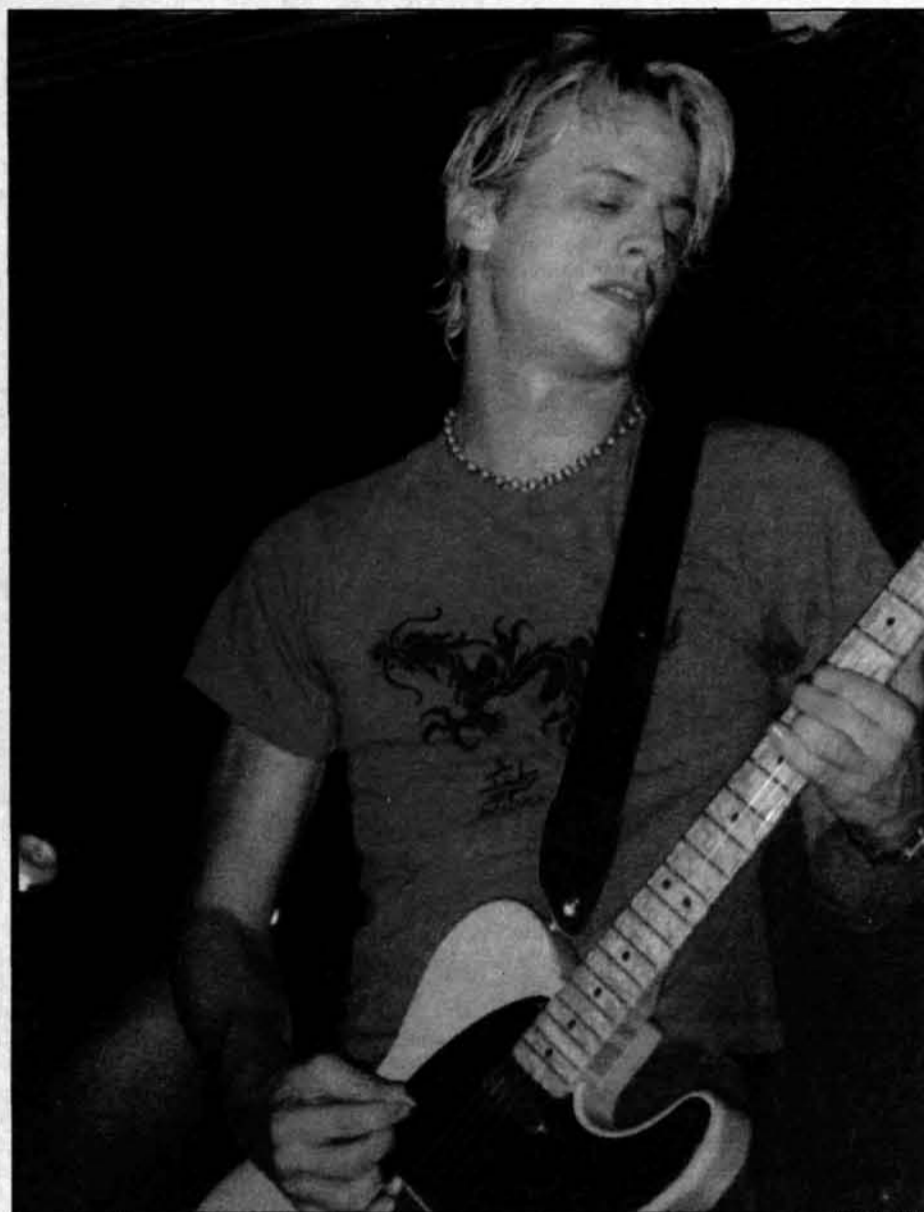
Fuel celebrated the arrival of this sophomore album with an online webcast, a record-release event in Harrisburg, Pennsylvania, and Fan Appreciation Shows across the country. On the 21st of September, they played for a psyched audience at Axis in Boston. They performed most of the tracks from their new album and coupled it with racing hits from their prior albums. Their energy-packed performance and caustic intensity filled the atmosphere, setting the mood for the night.

Scallions, clad in oversized cargo pants and a red shirt that complemented his toned body, looked good enough to charm any

woman alive. Bell looked collected and surprisingly non-rockstarish as he strummed away on his guitar. Abercrombie, on the other hand, was loving the attention and unsuccessfully trying to enamor the crowd. Shirtless and muscular, Miller was throwing all of his energy into an impressive display of percussion mastery. The intensity of Fuel's music could be felt by everyone who came out to support the band.

The setlist included a little something for everyone, from drum-heavy, head-banging numbers to slow songs with Scallions crooning into the mic. The band was obviously having a great time — Scallions has made it well-known that he loves being in the spotlight — and their infectious enthusiasm quickly rubbed off on the crowd, who were jumping, head-banging, and dancing throughout the entire ninety-minute set. Fuel is definitely a band that likes to get on stage and have a good time; during a bridge toward the end of the set, Scallions stepped back from the mic and did a little dance step that had the female half of the audience swooning.

As the group played their hit singles off *Sunburn*, Scallions encouraged the fans to sing along with him by pointing the mic toward the audience, who enthusiastically belted out the lyrics to "Bittersweet" and "Shimmer." Of course, by the end of the set, the audience was screaming for more. Fuel opened the encore with "Hemorrhage (In My Hands)," which had the entire crowd entranced by the consuming passion of the four musicians and the raw power of the music. It was an amazing close to an amazing show, and Fuel definitely lived up to their reputation for performing one of the most explosive rock acts in recent memory.



Lead singer and guitarist Brett Scallions of Fuel performs for a psyched audience at Axis last Friday. RACHANA OZA

Roadkill Buffet

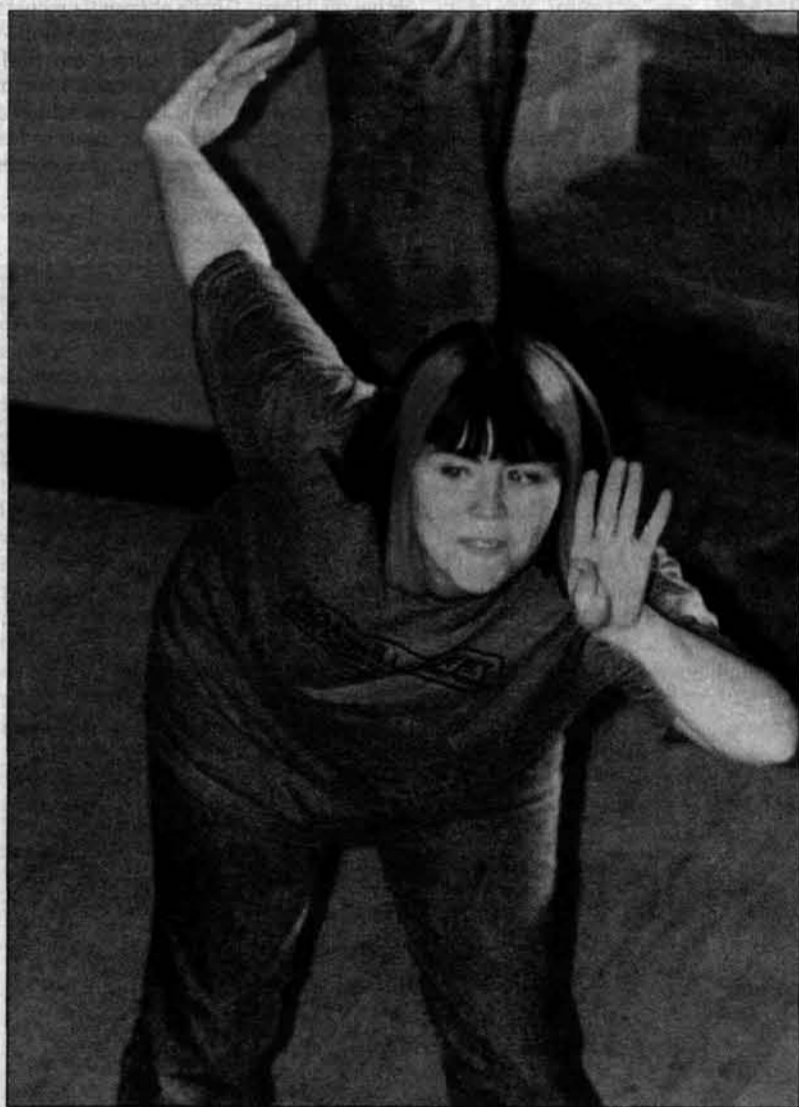
A Veritable Feast

(right) A packed house in room 35-225 enjoys Roadkill Buffet's first show of the year.

(below) Ben Balas '02 and Jared Schiffman G attempt to invent the electric motor, leading to the unfortunate demise of Chris Connor G.

(bottom left) Jared Schiffman G awaits an explanation of how cheese is made from his questioning-answering machine (from left to right, Dan Katz '03, Tanis O'Connor '02, Jeff Klann '01, Ben Balas '02).

(left) Tanis O'Connor '02 performs part of an opera in the rare language of "Scissors."



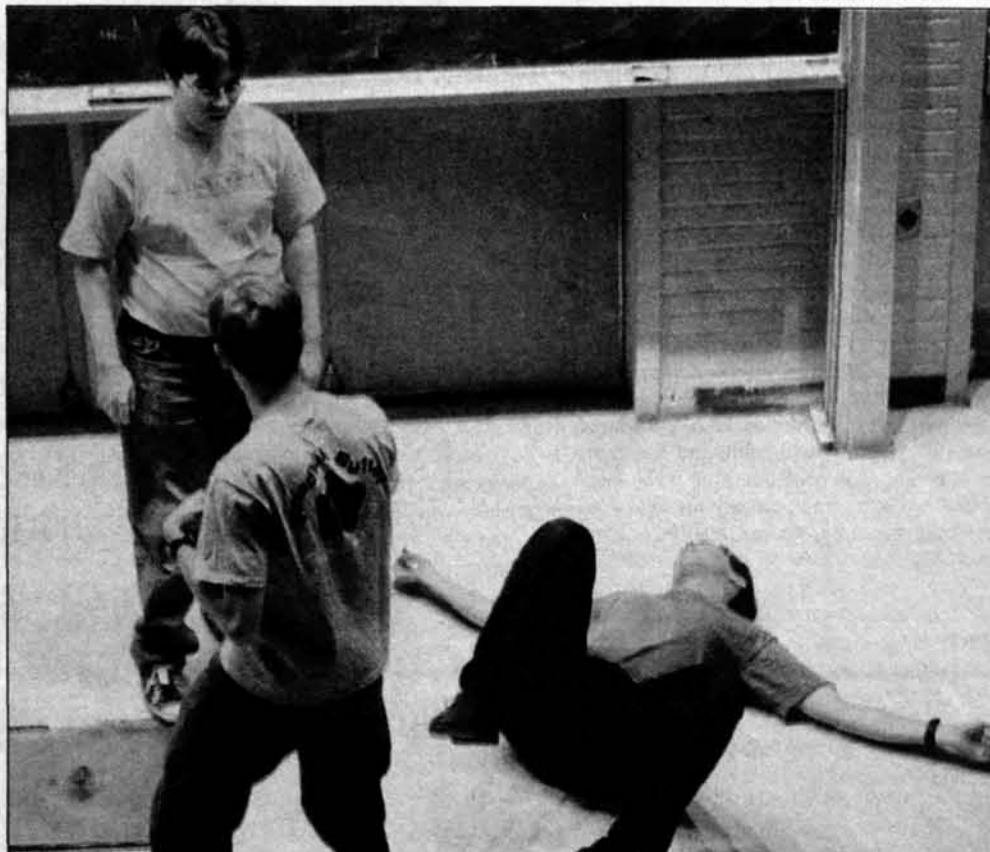
GARRY MASKALY—THE TECH



SONYA TANG



GARRY MASKALY—THE TECH



NIT DODOO—THE TECH

EXHIBIT REVIEW

Tech Photo Gallery

Capturing the Art of Ordinary Events

By Wally Holland

The air conditioner in the Wiesner Art Gallery rattles noisily and the concert band is rehearsing somewhere nearby and a problem set is being completed in the black-leather comfort of the Stratton Lounge, so there's no way to take in the photographs in silence. The urge is there: to take deep slow breaths and mouth the word "lovely" or the word "remember." Something about a gallery setting seems to demand rapt attention, a kind of strictly-enforced seriousness handed down from somewhere above.

There is real beauty here, clarity and honesty and motion: a photo of Ralph Nader draws your gaze in a narrowing spiral to meet his eyes, dark and intense; a baseball player caught on film becomes a steel spring, a whirl of unwinding noisy color; a student's profile flickers in and out of sight, outlined in slow half-light, hardly there at all.

What else to say, really? How does a person — much less a fearsome, fallible newspaper critic — evaluate this work, this atmosphere? There are memories of a past year here, to be sure. Fragments of a story are told, caught in a flash, a fraction of a second — moments which define events which, set beside one another, form a narrative. And yet these are news photographs, only "noteworthy" events, names which feel removed from us by virtue of their familiarity. More engaging are the nearby sports photographs, the arts photos: capturing a more consumed motion, rescuing remembered performances from the past. The detachment of viewing Big Events through a lens is, curiously, transformed into intimacy when the events are as simple as a soccer match, a stage play, a dance.

The setting begs critical commentary, and resists it: it seems easier to sink into reverie, to chatter about this or that moment last year. The pictures are props and starting points. Some photographs fail, though it's unclear why: perhaps they're forcing a viewpoint onto the moments they seek to capture, rather than letting the moments dictate their own memories. Some seem contrived, others succeed through contrivance; one photo elicits a sigh and its neighbor a derisive laugh. The Tech Gallery is largely a collection of art photos, self-consciously separate from the news photos and attaining a strange aloofness as a result. The exhibit doesn't whirl through a spectrum; it is posted in chapter — like a newspaper. If anything, the gallery reminds you of a daily paper's function: to report facts, not feelings. The posed Tech Gallery photos stand uncomfortably apart as a result.

But it's no matter: an effect is achieved, a journey is taken. *The Tech's* photography exhibit shows MIT life through a certain lens, that of the news photographer, and calls forth memories and understanding of a kind. It is a creation, a try at art even, and is owed a certain respect, a visit — even if silence is nowhere to be found. These photos are to be seen with the noise of daily life around them: the sound of their creation.



WAN YUSOF WAN MORSHIDI
The Tech's Wiesner Student Art Gallery exhibit shows MIT life through the lens of a news photographer, as in the bird's eye view of a bustling Sala de Puerto Rico.

EXHIBIT REVIEW

Technique Photo Gallery

Not Just the Great Dome or 77 Mass. Ave.

Gabor Csanyi

CONTRIBUTING EDITOR

I have to admit, I came to see the *Technique* photo exhibition at the Wiesner Student Art Gallery with a number of preconceptions. After seeing five yearbooks published during my time at MIT and browsing through several others, I thought, "Oh dear, not another perfectly executed picture of the Great Dome or 77 Mass. Ave." I was pleasantly surprised. There is only one dome, and it is small and purple.

Technique has done well to step outside their usual bread and butter, and showcase works that stand on their own, not just when taken in the context of MIT. They have done that while also indicating what they are really good at: reminding people of their years at the 'Tute — I remember that snowstorm; I've been on the roof and seen that magical Boston sky just after sunset.

If you decide to come to the second floor Gallery at the Student Center, you should have (at least) one objective: to see the photograph entitled "Gone" by Amanda Herrero. The remains of a wooden structure stand out from the sea, dark logs against the white featureless sky. They are left there to decay, to fight their own fight with the inevitable laws of nature. Was it a pier or something else? It doesn't matter now; its days are numbered. The innocent looking caption rounds out this picture: "... I don't think it's there anymore...." No matter how good anyone thinks he or she is, this picture belongs to Amanda, because the subject is gone. With stills and landscapes, that can

result in great treasure.

Ironically, it is only here that the meticulous craftsmanship that *Technique* cultivates in their darkroom work fails. Next to other perfectly printed photographs, here I would have evened out the dark and light tones on the logs, compensating for the sunlit bright spots on their tops. It would have made an even stronger contrast between the foreground and the distant, fleeting seascape.

But moving on. Any future *Technique* editor would be well advised to post a very large sign in their 4th floor suite: "No More Stair-



ANDREW CHEN

Photos like "San Francisco Streetcar" can be seen at the Wiesner Student Art Gallery, where works by *Technique* yearbook staffers are currently on display.

cases." Or "Exit" signs, for that matter. It's been done to death, and while it may be possible to say something new about staircases or simple signs, it is not done here.

As I am typing this, sitting on the bench in the Gallery, I keep having to get up, and go back to the panels just to remind me of the photos that are out of my view. This is not good. I should not continue to forget the images on the timescale of a few minutes. Or should I? There seems to be one problem with a lot of these pictures: they refuse to stick in my mind. There is a mild feeling of ordinairiness, photographically speaking.

Will they stick to your mind? It is worth finding out.

You need a pretty good SAT score to get into college.

Almost good enough to get into our internships.

Congratulations. All the cramming, insomnia and junk food breakfasts have paid off. You're in college now — and soon, you'll be facing questions about your life. Like what to do with the rest of it. One thing is for sure, if you're a student of color, with an INROADS internship you could have a serious job every summer while you're still in school — making contacts and gaining experience in your chosen field of study. Hey, it won't be easy, but then again if you wanted it easy, you wouldn't be reading this right now.

web site www.inroadsinc.org

617-482-5202

You got this far. Now go farther.



CONCERT PREVIEW

Marvelous 3 and SR-71

The Too-Much-Rock-For-One-Band Tour

By Dan Katz
STAFF WRITER

It always puzzles me when bands get huge exposure across the country and particular cities just don't catch on. The Marvelous 3 had a huge hit a few years ago with "Freak of the Week" (recently heard in the movie *Loser*), but its follow-ups have barely registered on the radar in Boston. Hopefully, when they appear this Wednesday night at Axis with SR-71, the latter band's big hit, "Right Now," will bring in some new fans to boost the Three's local rep.

That track was, in fact, a collaborative effort between the two bands; while it's performed by SR-71, the song was written by SR-71's lead singer Mitch Allan and the Marvelous 3's lead singer Butch Walker. Don't let that make you think Allan and his young bandmates don't have songwriting skills of their own. The band's debut album, *Now You See Inside*, is packed with marketable tracks, some of which are a bit formulaic, others of which stand very well on their own.

The album opens up with a duo of punk-pop tracks, the upbeat "Politically Correct," which sets a mood of adolescent rebellion, and the diabolically infectious "Right Now." Then the atmosphere switches radically, however, as "What A Mess" starts off with a quiet guitar line ringing in the darkness beside tense, whispered vocals, which eventually make way for a more full chorus. It's at this point we discover that SR-71 aren't simply successors to Blink-182's throne; they cover the gamut of alternapop, from the angsty urgency of Eve 6 to the unforgettable guitar hooks of Third Eye Blind.

The disc's highlights include the brilliantly written "Alive," and a very viable second single, the catchy and energetic "Last Man On The Moon." The album loses a little steam as the end draws near with the mildly forgettable tracks "Go Away" and "Paul McCartney," but even these songs are listenable, and as a unit, the album is very solid for a debut.

The Marvelous 3, on the other hand, are supporting a third album, and their maturation shows from the first note to the last. The band's first album, *Math And Other Problems*, was wild and fast-paced; their

followup *Hey! Album* had much better production and a more varied sound, but seemed to lose just a smidgen of spirit (although the band's live shows, full of high-speed improvised rambling and guitar pick acrobatics, never lacked for energy). They may have noticed the difference, because shortly before the release of their third album, Walker announced that their new goal was to recreate the band's live sound. With *Readysexgo*, they have accomplished that and more.

The Marvelous 3's sound is somehow novel and classic at the same time, based around straightforward modern guitar licks with a bit of a hair band mentality in the vocals. One of the credits in the liner notes lists the people singing the line "Everywhere there was a big Def Leppard sounding gang vocal." This, it turns out, happens in a lot of places, as the trio's new thing seems to be huge epic choruses. It's a tactic that can flop if you don't do it right, but on songs like "Grant Park" and "Radio Tokyo," the band pulls it off flawlessly. It shows especially well in the album's excellent closer, "Cigarette Lighter Song," where a lonely piano musically bursts into flames as a huge vocal harmony enters the soundscape.

The lyrics on the new disc are just as witty and wordy as they've always been. In "Grant Park," Walker calls unfaithful love "about as tacky as a satellite dish on a hot pink house with a burgundy door." "Cold As Hell" revolves around the chorus line, "She said I was cold as hell / But hell's not cold, I know, I know / 'Cause I've been there for the last half hour or so / And the devil said it never snows." It's this light-hearted attitude and way with words, combined with killer musicianship and amazing songwriting that makes the band a pleasure to listen to live and on CD.

Wednesday night, Axis will showcase an up-and-coming nostalgia rock band (additional openers Tsar), one of the fastest-learning rookie acts to appear in recent years, and finally, for my money, the best live guitar rock band in North America; ten bucks and a trip to Landsdowne Street seems a small price to pay for that combination to me. Do yourself a favor if you haven't made it out to any concerts yet this year. Come to this one. You won't be disappointed.

FOOD REVIEW

The Essential Vegetarian

By Katharyn Jeffreys
FEATURES EDITOR

Welcome back to another fun and informative year of *The Essential Vegetarian*. For you freshmen (or if you never happened to pick up *The Tech* before), this is a weekly column discussing health and environmental issues, recipes, and restaurant reviews from a vegetarian perspective. This start of the column's fourth term is marked by a switch from Fridays to Tuesdays. As always, e-mail <veggie@the-tech.mit.edu> with comments, suggestions, facts, or recipes.

It is great to be back in Boston where options for vegetarians are diverse and satisfying. I spent the summer in the Midwest in an internship program that brought students together from across the country. Needless to say, with such diversity comes differences of opinion, and I frequently had to defend my choice to abstain from eating meat.

Perhaps most surprising was a lunch I had during my first week in Detroit. Having grown up in Chicago, I know that Midwesterners are generally meat-and-potatoes people. I was shocked, however, to find that the Chinese restaurant I dined at offered absolutely no vegetarian entrées. The only non-meat item listed on the menu was vegetable fried rice. There was no tofu, no mixed veggie dishes, not even vegetable spring rolls. Fortunately I was living in a college town and most of my choices there were more like those in Boston.

Since being back I have visited several new restaurants. The first is Iruna, located at 56 JFK Street in Harvard Square. Iruna is a family restaurant in the first floor of a house, serving Spanish cuisine. The matriarch of the family greets customers at the door while her son waits tables on the small back patio. Presumably Dad is in the kitchen cooking. The crowd on the night I visited was distinctly middle-aged, not the frolicking college students found at many other establishments around the square.

The menu is limited. Down one side are tapas (I had the *setas al ajillo*, or sautéed mushrooms with garlic for \$4.75), down the other are Spanish omelettes (I chose asparagus as my filling for \$6.75). Proportionally, there were many veggie options among the short list of dishes. Both dishes I tried were extraordinarily oily, but also flavorful and wonderfully textured. Also on the menu are dishes containing potatoes, cheeses, and other vegetables.

A good Spanish meal is rounded out by a glass of sangria, or white wine. Iruna's sangria leaves much to be desired — it seems to be made with neither fresh fruits nor quality wine. The table white wine, however, was definitely palatable and served as a perfect compliment to both the food and the night air.

As always, I will close with a vegetarian recipe. Try making a Spanish omelette yourself. Mix in fresh vegetables, potatoes, cheese, or whatever you have in the fridge.

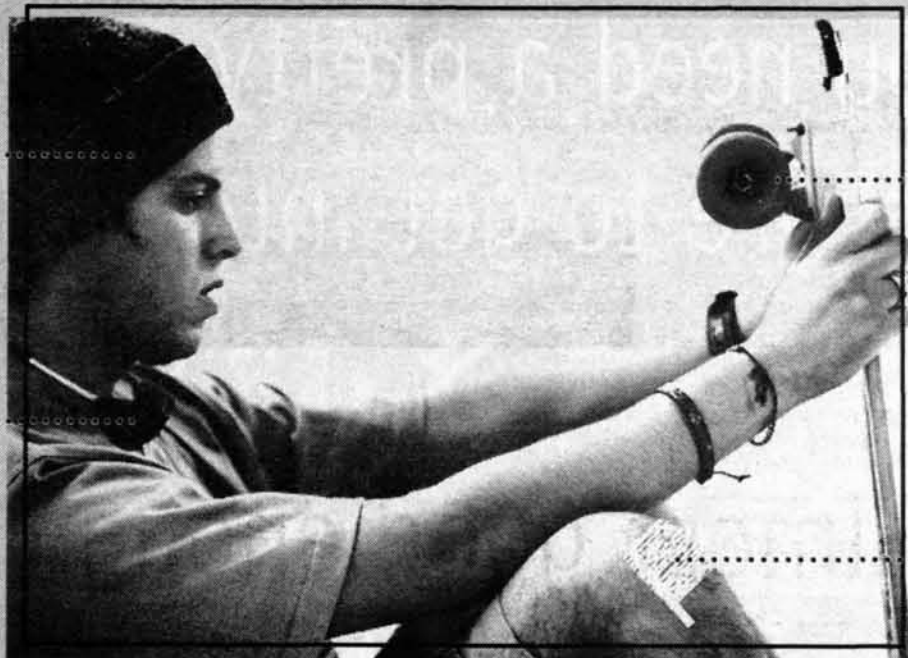
Spanish Omelette

- 2 eggs
- 1/4 onion, chopped
- 1/4 tomato, chopped
- 1/4 capsicum pepper, chopped
- 3-4 button mushrooms
- A pinch of white pepper powder
- Salt to taste
- Oil or butter for frying

Beat the eggs in a bowl with salt and pepper powder in it. Heat oil in a pan, and fry the chopped onions, tomatoes, mushrooms and capsicum. To this, add beaten egg. Stir the eggs only on the upper layer with a fork until they get boiled for 10-15 seconds. Then, fry on the other side for 10-20 seconds. Serve hot with toast.

10:20am
Noggin Toppers <.....>
\$12.95

3:17pm
The Music Shack <.....>
\$19.95



11:38am
Boards N' Stuff >.....<
\$49.95

6:18pm
Quickrite Pharmacy >.....<
\$2.99

TOTAL ACCESS TO YOUR MONEY.
WHAT YOU DO WITH IT IS UP TO YOU.



The Fleet Student Banking Package.

More than 3,400 Fleet ATMs. Fleet HomeLinkSM online banking. And the go-anywhere-do-anything Total Access Card. It can be all yours with the Fleet Student Banking Package. Plus free stuff. Just sign up and get \$20 off when you spend \$100 or more at bigwords.com. Call 1-800-CALL-FLEET (1-800-225-5353) or stop by a Fleet branch today.



THEATRE REVIEW

Dead End

Lives Up to Its Name

By Bence Olveczky
STAFF WRITER

Directed by Nicholas Martin
By Sidney Kingsley
Music by Mark Bennett
Stage Set by James Noone
With Jon Patrick Walker, Charlie Day, Jack Ferver, Dominic Fumusa, Kathryn Hahn and others
Playing at the Huntington Theatre, 264 Huntington Avenue, Boston
(617) 266-0800
Tuesdays through Thursdays at 7:30 p.m.,
Fridays at 8 p.m., Saturdays at 2 p.m. and 8 p.m., and Sundays at 2 p.m.
Dead End will be playing through October 8th
Tickets \$12-55

Dead End, kicking off the season at the Huntington Theatre, creates a convincing illusion of life in Depression-era Manhattan. But while the craftsmanship is impeccable and impressive, the show as a whole is an emotional dead end. The inaugural production of Huntington Theatre's new artistic director, Nicholas Martin, fails to infuse Sidney Kingsley's antiquated play with the urgency and relevance it so clearly needs.

The lavish — almost operatic — stage design and the carefully choreographed supporting cast of more than forty actors cannot save this soulless show, which is devoid of ingenuity and imagination. Penned in 1935, *Dead End* was the first Broadway production to deal with the mean streets of Modern City life. It became an instant success and was made into an Oscar-winning film starring Humphrey Bogart. But to secure the play's broad appeal, Sidney Kingsley shied away from a critical and controversial treatment of his otherwise very potent subject matter, making *Dead End* a light and polite commentary on a serious societal issue.

The Pulitzer prize winning author set his story in a poor East Side neighborhood that is slowly being engulfed by developers catering to the rich and famous. The clash between have and have-nots, highly relevant for present day Cantabrigians, is illustrated in *Dead End* through the struggles of a group of restless street kids. Unfortunately these "dead end kids" are portrayed in a cliché-like manner, lacking in personality and charm and psychological complexity. This is a shortcoming of the play that is only aggravated by director Nicholas Martin's Broadway-like staging that emphasizes style, not substance.

But while the production is both predictable and pompous, it is also highly professional, and it is evident that Martin knows the tools of the trade: *Dead End* is crafted with the same skills that would be expected for a blockbuster musical. The illusion of reality is cleverly created — not by theatrical magic, but by an ensemble of capable stage, light, and costume designers, all with extensive Broadway experience.

The authentic recreation of Depression-era Manhattan is impressive, and there is even a water-filled pool in place of the orchestra pit, representing the East River. Jumping into the pool with a big splash becomes an attention grabbing trick used by the "dead-end boys" to liven up the audience in times when the play is lagging, which — admittedly — is far too often.

The acting provides no thrills. The large ensemble is made up of a mixture of students and established actors, but it is hard to tell the amateurs from the professionals. The characters are all rather one-dimensional and any serious theatrical talent is certainly wasted here. Sadly for some, *Dead End* may also be an indicator of what Huntington's newly baked director has in store. If his first production can be used to predict the future, then we must brace ourselves for more theatrical cotton candy. Such easy-to-digest crowd pleasers may keep the box-office happy, but those of you thirsting for experimental, cutting-edge theatre will likely have to look elsewhere.

BOOK REVIEW

When We Were Orphans

An Intelligent and Nuanced Book

By Jane Maduram
PRODUCTION STAFF

By Kazuo Ishiguro
Price: \$25.00
Published by Alfred A. Knopf

It is rare that one finds so delicate and translucent a work as *When We Were Orphans*, by Kazuo Ishiguro. In the author's hands, the texture of modern life fades away to the slightest essence of perfection, tempered by hindsight and mellowed by experience. The story effortlessly weaves together the present and the past of the narrator, Christopher Banks, a detective who has an unusually distinct view of people and society. As he wanders through the high society of England and as a child in Shanghai, Banks seems an outsider distant not only from society but from humanity itself, a man trying to imitate the gestures and customs of the world around him in the hope that he will ultimately understand it. Part of his loss and confusion rests around the mystery of his parents, both of whom he abruptly lost in his childhood.

In the dreamy, almost hallucinatory world of the narrator, scenes take on an unnatural sense of resolution. The only passion existing in Christopher's bleached life is his profes-

sion, an adult extension of the childhood games he used to play in Shanghai. Everything else seems unreal to Christopher, who is gifted with an unusually exceptional memory. Despite this, he has "been obliged to accept, in other words, that with each passing year, my life in Shanghai will grow less distinct, until one day all that will remain will be a few muddled images." As if to ward this fear off, Christopher brings every detail he can remember into sharp focus, oddly recording the pre-science of a child with an adult's acknowledgement of fact. It is here that the author's skill is most evident.

While the recitation of so many incidental and tangential details could easily stunt a lesser book, Ishiguro carries it off with wit and flair. The book combines the slow, highly personal style of an introspective piece with the incidental additions typical of a stream-of-consciousness novel. That the novel conveys emotion without descending into drivel is amazing; both genres are equally annoying when implemented alone. The success of this blended style is largely due to the narrator's sarcasm and peculiarities. The grace with which the author effortlessly preserves and boxes each emotion and idiosyncrasy, like a fragile insect, is incredibly haunting.

One of the key peculiarities of Christopher is his dismissal of any activity as a test that can be crammed for through observation and books. Just as Christopher blends into school by copying the mannerisms of his classmates, he measures himself against his vocation by reading Sherlock Holmes. The absurdities of life are quantitatively reduced to odd rules. Once, Christopher remarked, "I recall observing a mannerism ... of tucking the right hand into a waistcoat pocket and moving the left shoulder up and down in a kind of shrug to underline certain of their remarks." His odd ambivalence is supported by the writing, which transitions so smoothly between setting, time, and characters that the reader is lulled into sharing Christopher's disregard for life.

It is ultimately because the book spends so much time in this state of nuanced apathy that the ending comes as a such shock. Accustomed to the passage of time in ambiguous uncertainty, the blunt sledgehammer of truths that rain down at the end are jarring. It is ironic that the same excess of facts designed to reveal the truth simultaneously obscures it, and the most revealing things are the undefinable, unpredictable emotions of a child.

MUSIC REVIEW

State of the Airwaves

Morphine, Mavies, and Music Television

By Dan Katz
STAFF WRITER

Iwent to Fenway on Sunday and saw the Red Sox for the first time. They won when a batter was walked while the bases were loaded. I'm not sure what's more pathetic: winning a game by getting walked, losing a game by walking a batter, or the hot dog I paid three bucks for. It makes me pine for my childhood in Philadelphia Phillies country, where games didn't come down to walks ... mainly because by the seventh inning Philly was usually down by at least eight runs. At which point Mitch Williams would come out to "save the game" and pitch the ball toward the dugout. But I digress. Unless you've been living under a rock (which is defined as not reading this column weekly), you know about my pick for the Airwaves Show of the Week — an extremely promising Wednesday show at Axis with the Marvelous 3, SR-71, and Tsar. If you're still resisting my magnanimous praise for the Three's live shows, Juliana Hatfield and Southeast Pennsylvania's Weston are in town the same night, at the Roxy and TT The Bear's respectively. I was also given a tip to check out tonight's show at the Middle East with a Canadian indie rock group called the Weakerthans.... No guarantees there, but the informant seemed pretty enthusiastic.

Friday there's another trio of decent shows. My pick goes to Queens of the Stone Age, whose rock minimalism should meld nicely with the more layered sound of their opener, VAST. The Avalon hosts a reunion concert from eighties popsters the Bangles, and New Wet Kojak plays a show at the Middle East. Finally, if you've got nothing to do Saturday night, you might want to head to the Avalon and check out Great Big Sea, an excellent folk-rock band from Newfoundland.

Take a look at your calendar. Yup, I bet you didn't know it was National Side Project & Live Album Week, did you? Well, maybe it's not, but it'd sure seem like it if you were standing in a record store, since today you'd see releases from Slash of Guns 'n' Roses (*Ain't Life Grand*), Ratdog featuring Bob Weir of the Grateful Dead (*Evening Moods*), and Andy Summers, former guitarist for the Police (*Peggy's Blue Skylight*). The third album strikes me as the most promising. Summers is one of the more underrated guitarists in the world today, often lumped into the category of "80s music" by people who don't realize how innovative many of his guitar lines were.

The man you remember more clearly from the Police, Sting, leads the list of live albums with *Brand New Day*; also on that roster is Pennywise (*Live At The Key Club*) and Morphine, whose *Bootleg: Detroit* is the only live bootleg of the band authorized by front man Mark Sandman before his unfortunate death. As for good-old studio albums, Hooverphonic serves up *The Magnificent*

Tree as a taste of what they'll sound like when they open for BT next month. And Black Eyed Peas, who landed a slot on No Doubt's tour this summer, present their latest, *Bridging The Gap*.

Singles from the new Limp Bizkit album have officially been released to radio. Yes, I said singles. Fred Durst thinks his band is big enough to support two simultaneous tracks on the radio. Unfortunately, he's probably right. To me, both of the songs seem very similar in sound and structure, but I like "My Generation" better than "Rollin'" because it has a catchier chorus, and the radio edit has more creative use of censorship: in the chorus alone, words are "bleeped" out in three different ways, which actually ends up adding a lot to the music. Word has it that Limp Bizkit will be headlining the next Family Values Tour. This bothers me, as I'd like to see the torch passed to another band as it was from Korn to Bizkit. Papa Roach and Disturbed strike me as reasonable recipients.

Speaking of Disturbed, here's a rare relevant wrestling reference in this column. Most WWF fans are aware that "Stone Cold" Steve Austin is making his return to wrestling tonight on pay-per-view. What fewer people are aware of is that his well-known theme music has been retooled and re-recorded by Disturbed. This, along with the Undertaker, who currently uses Kid Rock's "American Badass" with his entrance, is probably only the beginning. Next week, "WWF Sunday Night Heat" moves to MTV, which means more and more of a return to the rock n' wrestling connection that surrounded the first Wrestlemania.

I was thinking of asking a trivia question to get people to send me mail, but I forgot what it was. If you think you know the answer anyway, feel free to send it to airwaves@the-tech.mit.edu, along with your rants and raves regarding rock, your picks and pans pertaining to punk, and other cute alliterative phrases. Enjoy your week, and as always, keep expanding your horizons.



Limp Bizkit (from left, John Otto, Sam Rivers, Fred Durst, DJ Lethal, and Wes Borland) have two singles playing the airwaves: "My Generation" and "Rollin'."



This space donated by The Tech

FOOD REVIEW

Campus Cheap Eats

Aramark Cafés

By Erik Blankinship
STAFF WRITER

Bio-Café

Building 68 (Biology Building), 1st Floor
31 Ames Street
Phone: (617) 252-1864
Monday through Friday 8 a.m. – 3 p.m.

Affectionately known as the “Bio-Hazard Café,” this little nook on the ground floor of the biology building is quite possibly the cleanest cooking facility on campus. This place is known by many for their smacking good BLT (bacon, lettuce, and tomato) sandwiches (~\$5.00). If you arrive early for breakfast, you can ask for a few strips of bacon and the cook will oblige for a dollar. They offer a variety of other sandwiches, including chicken and Italian hoagies. One of my friends who eats their regularly insists that the “hots” are what make the sandwiches so good, so pile them on.

The bagels (~\$1.00) are very soft and mushy, making the self-serve bagel cutter capable of only smushing your bagel into a small mound of dough before it finally cuts through. The toaster can be set by the user, so

be sure to check the settings before you burn your breakfast. The other fare is standard across all of the Aramark facilities: really small cartons of orange juice and milk, yogurt, and some fresh pastries which are really quite tasty and not overpoweringly sweet and sugary.

There are also a good selection of vending machines here, including an ice-cream machine which uses a giant suction hose to retrieve your selection. It's worth getting an ice cream just to see the machine come to life and retrieve it for you. There are also fruit juice machines and soda machines which only dispense cans (no bottles).

In preparation for this review, I talked to Leslie Hastings, the manager of the Bio-Café and the other cafés in this review. She said she encourages students to give her recommendations for making the facilities better. The Aramark management act on every suggestion, and even take into consideration the large number of cruel suggestions students leave in their recommendation boxes. I shared with her VooDoo's recent reviews of the campus dining facilities and she laughed out loud, so it looks like she can take the barrage of Aramark criticisms pretty well.

It should also be noted that John, the attendant who runs the Bio-Café in the morning, just became a dad last week so be sure to wish him and his family the best of luck!

Building 4 Coffee Shop

Building 4 (Maclaurin Buildings), 1st Floor,
Adjacent to Infinite Corridor
182 Memorial Drive
Monday through Thursday 8 a.m. – 5 p.m.
Friday 8 a.m. – 3 p.m.

During peak hours, the line for the corridor's coffee shop often stretches out of its little nook in Building 4 and down the hallway. The coffee shop has finally adopted extended hours, so you can grab a cup of coffee in the late afternoon without trekking to one of the ends of campus. The morning rush is intense, and the staff is sometimes literally filling up their shelves as patrons grab their food selections.

Fortunately, the campus coffee shops still serve Green Mountain Coffee. LaVerde's switched brands this year to a coffee that tastes like a mixture of god awful McDonald's coffee and cleaning fluid. Like LaVerde's, the Building 4 Coffee Shop sells large fruit cups for \$3.25, which offer a rather uninteresting combination of fruits: no strawberries, blueberries, or anything else to offer some sort of extra flavor over the chopped melons.

The coffee shop proudly advertises that they now have sushi. I was pretty impressed with this eclectic offering as I don't know of many state-side coffee shops offering sushi and coffee. Unfortunately, an examination of

the ingredients turned me off, as the third ingredient listed was “imitation crab meat” and I don't have a clue what that means. It's a bit of a trek, but I would rather head to the Bread and Circus in Central Square to get some “real crab meat” when I want sushi for lunch. Why can't Aramark make all of their options healthy and natural foods?

Dome Café

Building 7 (Rogers Building), 4th Floor
77 Massachusetts Avenue
Monday through Thursday 8 – 6 p.m.
Friday 8 a.m. – 3 p.m.

The Dome Café offers the best views on campus for those eating their lunch. You can glance over at the top of the dome, or across the river to see the tops of Boston's horizon. The tall windows offer a nice amount of sunlight, which is difficult to find in the corridors and basements of the 'Tute where most of us spend our days.

The Dome Café offers a lunch option none of the other cafes offer: grilled panini sandwiches (~\$4.95, also available as half sandwiches and with soup). The attendant will grill your choice of hummus, chicken, or roast beef sandwich for you in a special panini sandwich press, which gives a nice crunchy texture to the bread. Unfortunately, when I did try the chicken sandwich, it was still really cold inside, though the attendant said it wouldn't happen in the future.

They also offer really tasty looking slices of carrot cake, along with fresh fruit.

Event Planning Workshop!



Will you be planning a large event for your Student Organization, Fraternity/Sorority or Independent Living Group, or Residence Hall this year?

Do you need help in navigating your way through MIT's Event Registration Process? Attend an **Event Planning Workshop!!**

Thursday, September 28 from 6-7pm
OR

Friday, September 29 from 5-6pm
Both will be held in 4-237

©2000 MERRILL LYNCH & CO., INC.

All-nighters in the lab.
Caffeine overload in the carrel.



Would \$50,000 and
an introduction
to some hot venture capitalists make it
a little more worthwhile?

That's exactly what the Merrill Lynch Innovation Grants Competition is offering the PhD candidate who best describes the commercial potential of his or her research in science, liberal arts, or engineering.

In fact, our third annual competition will see a total of \$180,000 in cash grants awarded by an independent panel of distinguished scientists and entrepreneurs. Winners will retain the rights to their ideas and meet with leading venture capitalists.

Last year, Islamshah Amlani of Notre Dame took first place with a transistorless digital logic paradigm that could lead to a new era of super-fast “quantum computing.”

Merrill Lynch Chairman and CEO David Komansky notes, “Through the Innovation Grants, The Merrill Lynch Forum is challenging the academic research community to take a fresh look at their ideas from a completely different perspective—that of the marketplace.”

For entry information, applications, and proof that excellence pays, visit us at ml.com/innovation.

MUSIC REVIEW

Madonna: Music

Better "Music" Would Bring the People Together

By Erik Blankinship

STAFF WRITER

I was pretty enthusiastic when Madonna's new single "Music" hit the air in August. It was a great dance track with some funk to it, and even the music video was pretty entertaining with its cartoons and flying logos.

It was like a Madonna hit out of the '80s, not the uninspiring "Ray Of Light" or "Take a Bow" she has given us in the '90s. I anticipated the new album as being nothing but pure pop — and this would be a good thing — something to dance to, hear on the radio (and actually keep on the radio), and maybe even sing along with. I haven't given a damn about Madonna's last three albums and I was psyched for her to get back into some unadulterated pop grooves.

The new album, however, is quite lackluster. Most of the tracks are quite listenable, but rather uninspiring beyond the first spin. I am hard pressed to find myself humming any of these tunes an hour after listening to them. In her new album, Madonna seems to be obsessed with adding effects to her voice, and on one track she sounds as bad as Cher singing "Do you believe in life after love...." In fact, that over-played Cher single sounds like most of *Music*, only Cher is a lot catchier. The effects on Madonna's voice are fun for a listen, changing from a robotic chipmunk sound to an oscillating bird warble. For good measure, Madonna also throws in some funky starts and stops into her tracks, making the whole album push forward with a pretty listenable groove, but not one with a lot of resonance.

It is a shame that Madonna, whose voice has brought her this far into stardom, would bury it under so much processing. When she does sing out, as she does in the final track "Gone," you can hear the real power of her voice. Unfortunately, most of the album sounds like the Pet Shop Boys' "Domino Dancing." At its worst, most of the album sounds like standard club fare: a pop track without really catchy grooves and only a

slightly memorable chorus.

The album liner directs the listener to Madonna's website for lyrics, which will bring any machine slower than 500MHz to a crawl because of all the Quicktime streams and Flash animations, and since it is Flash, it is impossible to copy the lyrics. It looks nice, but the site suffers from feature overkill, just like the album.

However, Madonna's *Music* is not a complete failure. The track "What It Feels Like For a Girl" is one of the few songs which stands out as inspired. The sultry title is prompted as a question to the listener, and when Madonna whispered this question to me in my office, it suddenly felt a little warmer, and I closed the door so Madonna could tell me what it was like with a little more privacy. She doesn't go into any "bedtime story" descriptions, but the track nonetheless is a good one.

"I Deserve It" is another of the album's small points of light. Madonna sings a ballad about having finally found a man worth all of her past woes. Her voice is full and soothing, and the instrumentation is a nice background of soaring digital effects. Remember

how good she sounded on "Live to Tell" back when? You get a bit of that pop vocal power back with this track.

Then again, there are tracks like "Amazing" which are, well, just not. Digging back into Madonna's song vault, do you remember that track "Jimmy, Jimmy" from the *True Blue* album? Remember how terribly annoying it was? Well, it looks like Madonna decided to take some of her worst approaches to song writing and reapply them on "Amazing" wherein she states over and over "it's amazing

what a boy can do."

I somewhat believe we are in the midst of a pop music renaissance, the likes of which we haven't encountered since the early 1980s. As proof we have had a pop music dry spell, I use Weird Al Yankovich as my barometer, who had to cover "American Pie" for his album's last title track. For years there have been no new recordings worthy of his mockery. And Madonna isn't helping: she covered "American Pie" too, but her version sucked. If we are going to have a complete and total return to pure pop, we need new material. The first sign of this new pop music age is the advent of Britney Spears. Regardless of what you think about Ms. Spears, you cannot deny that she is pure pop and making a big splash. Maybe Madonna is just running out of music.



On the shelves, on the air, and on the charts, Madonna's *Music* is disappointing and only slightly memorable.



Photography by Saphir Hamilton

STAFF PHOTOGRAPHER

This Wednesday and Friday, a group of MIT community musical enthusiasts brings a selection of music and dance numbers from famous Broadway musicals to MIT's Killian Hall. The show, "Highlights from Musicals," incorporates favorites from shows like *The Phantom of the Opera*, *Les Miserables*, *Chicago*, and *Guys & Dolls*.

Performances are free to the public: Wednesday (9/27) and Friday (9/29) at 8 p.m. in Killian Hall (14W-111). Contact musicals-dir@mit.edu for reservations.

(above) The scantily-clad cast saunters down the stage in their performance of "All that Jazz" from *Chicago*.

(right) Onur Usman '03 is "The Master of the House" from *Les Miserables*. From left to right are Elicia Andersen, Jesse Cox '03, Cemocan Yesil '03, and Caroline McEnnis '03.

THEATER PREVIEW

Highlights from Musicals



MOVIE REVIEW ★

Urban Legends: Final Cut

Let's Hope the Legend's Finally Over

By Ryan Klimczak

Directed by John Ottman

Story and Screenplay by Silvio Horta, Paul Harris Boardman, and Scott Derrickson

Starring Jennifer Morrison, Matthew Davis, Joey Lawrence, Anson Mount, Eva Mendez, Jessica Cauffiel, Anthony Anderson, Michael Bacall, Marco Hofschneider, Loretta Devine, and Hart Bochner

Rated R

Have you ever heard the urban legend about the decent movie that is butchered by its sequel? I'm not talking about *Halloween II* and *III*, but *Urban Legends: Final Cut*, a sequel to the mediocre, but original 1998 film. The legend continues as student filmmakers at the prestigious Alpine University film school must create original films in order to graduate, and even more importantly, to win the esteemed Hitchcock award. Inspired by the events that occurred at Pendleton University (*Urban Legends*), Amy Mayfield, (played by newcomer Jennifer Morrison), decides to create a psychological thriller about a murderer who kills people based on urban legends.

As she films her movie, strange occurrences happen, and her crew becomes murdered one-by-one by a masked psychopath.

Amy experiences both terror, frustration, and disbelief. She must overcome the doubt of others and piece together a confusing puzzle of envy, vengeance, and gore to contemplate the motives and unmask the identity of the brutal assassin.

Along with Amy comes an eclectic, but undeveloped cast including Vanessa (Eva Mendes), the lesbian sound-girl; Simon (Marco Hofschneider), the Euro-trash cameraman; Hollywood-brat Graham (Joey Lawrence); and Stan (*Romeo Must Die*'s Anthony Anderson) and Dirk (Michael Bacall), the two annoying special-effects geeks.

As the most current adaptation to the teen-horror genre, this movie is strikingly similar to *Disturbing Behavior*, paralleling both in underdeveloped plot and shallow approach to identifying with teen audiences. In both films, we see Hollywood's false conception that it can fill a cast with untalented, but attractive actors, and replace character depth and plot credibility with awkward sex scenes that reveal the bare chests of Katie Holmes or Jennifer Morrison to win over teen audiences. By anesthetizing moviegoers with gory scenes, Hollywood assumes it can produce a film void of cinematic quality. Such presumptions are obvious in *Urban Legends: Final Cut*, as Amy witnesses murders that are blatantly enacted from scene to scene and no one believes her

pleas, especially Reese (Loretta Devine), the *Foxy Brown* aficionado security guard from the original *Urban Legends*.

Another problem is the farfetched motive and identity of the film's killer. One universal underlying rule of teen-horror films, like *Scream*, *I Know What You Did Last Summer*, and *Urban Legends*, is to always maintain the ambiguity of the killer's intentions, and more importantly, the killer's identity, to provide some element of surprise. *Final Cut* successfully follows this tenet by pointing the audience to various characters as possible culprits. It strives hard to maintain a level of unpredictability; so hard that ultimately the real killer's motives and identity are implausible and lame.

Newcomer Jennifer Morrison provides a surprising performance, despite her inexperience with leading roles. Originally appearing in *Intersection* and *Stir of Echoes*, her talent as an actor has progressed immensely as she successfully executes scenes that require a lot of melodrama and intense emotions. Among all the actors in the cast, she presents the most credible approach and reactions to the murder scenes. Joey Lawrence, on the other hand, plays a stagnant role in the film with mediocrity, which in many ways parallels his unintelligible and cheesy acting in the TV series *Blossom* and *Give Me A Break*. In his portrayal of the obnoxious Graham, he shows little emotion as he ceaselessly talks on his cell-phone and spews out irrelevant phrases cornier than his clichéd "Whoa."

One of the main challenges facing this movie is the incorporation of new urban legends into the script, different than those used in the first movie. However, in this attempt, the writers used a different and unorthodox

method from the original, as both Amy and the killer became involved in each crime's enactment. Amy creates the set of the legend as she films her movie, and the killer utilizes that set to kill the victims. In the original film, the killer did both. This adaptation was an unexpected and original attempt to modify *Urban Legends*, but ultimately it is confusing. In the tunnel terror scene, for example, Amy tries to recreate the urban legend about the tunnel ride in which people view human carnage and dead bodies and believe that it is part of the ride, when in reality it is the mangled bodies of missing children from the area. As the killer commits the murders, the audience is left wondering how these slayings relate to the original meaning of the legend since the victims are merely killed inside the ride and not publicly displayed to unassuming carnival-goers.

In the words of Reese, "Urban legend my ass."

Another questionable aspect of the movie is its cohesion of comedy and horror, which sometimes made the movie more like the parody *Scary Movie* and less like the original film. Most of these scenes involve Stan and Dirk, film geeks absorbed in their own slapstick comedy and practical jokes, like fake latex dog entrails and mock death scenes, which unintentionally turn the comic relief into comic over-dos.

The main disappointment in *Final Cut* is its inability to tie together the original *Urban Legends* with its main plot. At no point does it provide any sort of resolution to the end of its predecessor. Furthermore, it fails to incorporate any new insight into the occurrences at Pendleton and the status of its surviving killer (Rebecca Gayheart). Some say legends never die, let's hope this one does.

Thanks to you, all sorts of everyday products are being made from the paper, plastic, metal and glass that you've been recycling.

But to keep recycling working to help protect the environment, you need to buy those products.

BUY RECYCLED.




AND SAVE.

So look for products made from recycled materials, and buy them. It would mean the world to all of us.

To receive a free brochure, write Buy Recycled, Environmental Defense Fund, 257 Park Ave. South, New York, NY 10010, or call 1-800-CALL-EDF.





Beijing
Boston
Buenos Aires
Chicago
Cleveland
Dallas
Frankfurt
Geneva
Hong Kong
Lisbon
London
Madrid
Mexico City
Montréal
Munich
New York
Paris
Pittsburgh
San Francisco
Toronto
Washington, DC
Zurich

see you at
the fair

www.mercermc.com

A Special Invitation to Masters Students

We will be at the Graduate Career Fair on Thursday September 28.

Please stop by and chat with our consultants about a career in management consulting.

...we will collect resumes

MERCER
Management Consulting

FILM REVIEW ★★★

*Urbania**An Innovative Approach to a Tired Genre*

By Jed Horne

Directed by Jon Shear

Screenplay by Jon Shear

Based on the play *Urban Folk Tales* by Daniel Reitz

Starring Dan Futterman, Matt Keeslar,

Samuel Ball and Alan Cumming

A Lions Gate release

Rated R for graphic violence and sexual situations

Urbania, actor-turned-director Jon Shear's two-year-long project and first theatrical release, is a surreal, often darkly funny look at the psychology of loss and the intricacies of the human experience. Based on Daniel Reitz's play, *Urban Folk Tales*, *Urbania* tells the story of Charlie (Dan Futterman, *The Birdcage*), a man introduced as having suffered a tragic loss and intent on regaining normalcy in his life. Charlie stumbles through the hyper-reality of New York City, voyeuristically obsessed with "urban legends" — peculiar vignettes which, the film argues, help us cope with reality's often caustic capriciousness. These tales become a metaphor for Charlie's own experience and provide a backdrop for his hallucinatory self-revelation and neurotic obsession with an ex-lover.

It is not until twenty minutes into the film that the audience discovers Charlie's sexuality. A chance encounter with Brett (Alan Cumming, *Eyes Wide Shut*), an old friend dying of AIDS, provides an introduction to the film's most controversial element: Charlie's past relationship with boy-on-a-pedestal Chris (Matt Keeslar). The key to Charlie's healing seems to be an apparently innocuous crush on the homophobic Dean (Samuel Ball). Without giving away too much about the film, Charlie's pursuit of Dean slowly exposes the nightmarish reality of Charlie's loss and the karmic choice he must make at the end of the film.

Shear's movie is as thought provoking as it is visually interesting. *Urbania* is, however, not without flaws. The actors involved in the movie are almost as unremarkable as their resumes. The performances, while competent, rarely shine with the requisite intensity for a film of this much ambition. One exception is Samuel Ball, whose portrayal of Dean is convincingly tragicomic and menacing. The screenplay, while occasionally biting, is intentionally unfocused and takes a little while to pick up steam. The urban legend theme, potentially an interesting subject, loses a little of its luster through

no fault of the movie's other than bad timing (*Urban Legends: Final Cut* is also opening this week). And, like many ambitious independent films, it occasionally borders on pretentiousness and a desire to universalize a sentiment not held by the unenlightened masses (read: homosexuality).

Despite the grimaces and turned heads of a few audience members, however, sexuality — homo or otherwise — is not really at the heart of the story. Even Charlie and Chris's relationship appears a

little too straight and curiously devoid of the usual homosexual stereotypes, as if a gay relationship would be difficult for an audience to empathize with. Like the equally insightful *The Opposite of Sex*, however, *Urbania* succeeds by treating a gay relationship with as much weight and seriousness as a straight one. Charlie could just as easily have been in a heterosexual relationship as in a homosexual one, which is why *Urbania* is more than a "gay" movie.

Besides its ambitious subject matter, what makes *Urbania* interesting is a cleverly designed plot structure, and a film style well suited for a world that is both very real and unreal at the same time. Using a zoom lens designed for a video camera, cinematographer Shane Kelly deserves credit for effectively texturing an urban environment based on Shear's own experiences in Cambridge (his theatrical career began while studying at Harvard).

Notable also is the innovative production

technique: the entire film was shot on Super 16 film, which produces an interesting combination of saturated colors and grainy images, accentuating the film's curious mix between myth and reality. In order to retain that effect, the film had to be transferred to a digital recording and then back to thirty-five millimeter — a first-of-its-kind process in independent cinema. Another notable technical achievement is the use of sound for effect on top of an impressive soundtrack: the audio-level is varied to enhance scenes of particular intensity and to accentuate Charlie's unstable mental state.

Not for the easily offended or the squeamish, and despite its shortcomings, *Urbania* is a substantively original work that deserves credit for its audacity. It is particularly impressive that the entire film was shot within a four-month period and for a budget of less than three hundred thousand dollars. If only Shear had counted on an audience response that was a little more, well, urbane.



Dan Futterman and Alan Cumming give decent performances in *Urbania*, an impressive film by Jon Shear.

MASSACHUSETTS SPACE GRANT CONSORTIUM SUMMER JOBS FAIR

How would you like a job this summer at one of the major U.S. aerospace companies?

Every year, MASGC* (Massachusetts Space Grant Consortium), places students in these prized summer positions. Come to the MASGC Summer Jobs Fair to meet the aerospace companies that will be hiring and to learn about the application process.

When: Thursday, September 28 - 5:30pm

**Where: MIT Stratton Student Center
Room 201 - West Lounge
77 Mass Ave, Cambridge, MA**

Refreshments will be provided

For more information, contact Helen Halaris at 617-258-5546 or halaris@mit.edu

The following companies will be represented:

Aerospace Corporation
Honeywell
Jet Propulsion Laboratory (JPL)
Lincoln Laboratory
Lockheed Martin Astronautics, CO
Lockheed Martin Missiles & Space, CA
Lockheed Martin, FL
Space Systems Loral
TRW Space & Defense

Other participating companies:

Boeing
Hughes Space & Communications
Orbital (OSC)
United Technologies

*MASGC is a NASA-funded program, and all costs for the MASGC Summer Jobs Program are paid by MASGC or MASGC's aerospace affiliates.



FEATURES

"Freshmen" Administrators

By Eun Lee

The start of this fall term marks a new beginning not only for most students but for administrative members as well. This year, four members of the administration, Larry G. Benedict (Dean of Student Life), Robert P. Redwine (Dean for Undergraduate Education), Katherine G. O'Dair (Assistant Dean for RLSLP), and Tracy F. Purinton (Student Activities Coordinator) occupy new positions of importance to the student body. Although they come from a wide range of backgrounds and each have different affiliations within the MIT community, they cumulatively carry years of experience and have a plethora of fresh new ideas to improve the quality of student life at MIT.

Robert Redwine is the Dean for Undergraduate Education. Redwine has been at MIT for 21 years as a member of the Physics faculty, and has served as the Director of the Laboratory for Nuclear Science for the last eight years.

His role as Dean for Undergraduate Education entails both an administrative and policy making aspect. Dean Redwine oversees a wide range of administrative offices including the Office of Academic Services, Career Services, Admissions, and the Office of Minority Education. He also collaborates with departments and programs to promote and support the overall quality of undergraduate education.

"I really look forward to working with the faculty and students and being able to make a difference in the quality of the undergraduate

education and experience," Redwine said. "It is paramount in a place like this."

He is optimistic about future educational opportunities available at MIT through increased technology and new learning resources that will improve and enhance undergraduate education. One of his major goals is to increase faculty involvement beyond the classroom. This commitment to enhance the undergraduate experience outside of the classroom environment is also shown through his involvement with student leaders of the Undergraduate Association, living units, housemasters, and Benedict.

Larry Benedict is the Dean for Student Life. A Massachusetts native, he comes to MIT after serving as Dean for Student Life at Johns Hopkins University for the past eight years. "This is an exciting time in the history of the Institute ... It is an exciting opportunity for me to be here to be part of the whole process," Benedict said. In the coming years, the Institute will be making

major investments to improve the quality of student life.

Some of Benedict's major objectives include improving the dining program, developing new housing and residential programs, working on a strategic plan for the athletic program, and collaborating with Redwine to explore various academic programs in residence halls. One of his biggest goals is to improve communication among and between the different constituents on campus.

In addition to building new facilities such as the new athletics center, Benedict hopes to improve existing facilities and dorms that are in desperate need of renovation. Other projects include building closer ties with FSILGs and seeing if RLSLP (Office of Residential Life and Student Life Programs) and FSILGs can work closer on programs and policies as well as providing more service and support.

Benedict is not only working to improve student life for undergraduates, but for the graduate student community as well. He hopes to provide more support for the GSC through support networks, possibly providing a limited health insurance, and increasing stipends for fellowships. According to Benedict, the best way for students to be happy with their college experience is to "get involved in your university."

Residential Life and Student Life Programs

Katherine O'Dair is the Assistant Dean for the Office of Residential Life and Student Life Programs. She has been at MIT for four years and previously served as the Assistant Dean for Student Activities. As Assistant Dean of RLSLP, O'Dair will be working on numerous projects, including improving and developing the current residential system and programs, working with the Graduate Resident Tutor program, and working on a new project to make systematic an information network between all residence halls.

Her goals for the coming year deal with a number of issues facing the MIT community and its residential system. She currently serves on several Institute committees such as the Committee on Discipline and the Committee on Campus Race Relations and also oversees Charm School. Besides her position as Assistant Dean of RLSLP, O'Dair is a good resource for students, whatever the issue.

"I have an open door policy," O'Dair said. "Students can come to me with literally any issue, and I can help them figure out the best place or person at MIT to address it."

Tracy Purinton is the new Program Administrator for Student Activities at MIT and works in the RLSLP office. As Director of Student Activities, she is responsible for the overall support of student activities at MIT and is working with the other members of her office to find new ways to better support student organizations on campus. Some specific activities that she works with include the Undergraduate Association, the Association of Student Activities, and the Graduate Student Council.

Her office hopes to promote the level of RLSLP's service to student organizations and to increase the visibility and use of the resources that are provided to these groups.

Purinton worked at MIT from 1993 to 1997 as the Assistant Director of the Public Service Center. She left in June of 1997 to pursue a Master's degree and now returns after spending two years at the Student Activities Office at Boston University. "I enjoy MIT's commitment to student initiative and student involvement" said Purinton.



Dean of Student Life, Larry G. Benedict.



Student Activities Coordinator, Tracy F. Purinton.

The Big Race 2000

Perspectives of Economy

By Derrick Carpenter
STAFF REPORTER

Al Gore and George W. Bush, two of the presidential candidates this year, have many plans and ideas for improving the national economy through tax breaks and social programs. Although representatives of often conflicting political parties, they share opinions on an array of issues. The key differences in their platforms deal primarily with the effects on the lower and middle class families versus those with high incomes.

Both candidates assume a ten-year, on-budget surplus in the trillions. Gore predicts a \$3.045 trillion surplus based on estimates of the Office of Management and Budget while Bush follows the January 2000 estimate by the Congressional Budget Office of \$4.115 trillion. Both support raising the threshold for the phase-out of child tax credit to \$200,000 for all from the current \$110,000 for married couples and \$75,000 for single parents. Bush and Gore both believe in reducing the marriage penalty by re-instating the ten percent deduction for families with two earners, allowing up to an additional \$3,000 deduction. Each stands behind the initiative to extend deductions for charitable contributions to taxpayers who do not itemize and the permanent extension of the Research and Development tax credit, which is currently scheduled to expire in 2004.

Furthermore, Gore supports setting aside \$2.169 trillion for

Social Security from 2001-2010, along with spending \$64 billion to reduce the federal deficit. He also advocates spending \$432 billion to improve the current Medicare program, which would include primarily prescription drug benefits. The Vice President supports the present child tax credit of \$500, but desires an increase to the Earned Income Credit earnings threshold and marriage penalty relief by doubling the standard deduction for joint filers. In addition, he would like to create Universal Savings Accounts to help low- and middle-income families save for retirement, specifically those without the opportunity to access IRAs or 401Ks. Gore also favors the installation of a 401(j) Life-Long Learning Account which would allow families and employers to contribute up to \$2,500 a year for any educational or qualified life-long learning expenses.

On the other hand, Bush favors \$2.282 trillion to be set aside for the 9-year Social Security program, while supporting using the projected federal surplus for a 5-year, \$460 billion tax cut, including the simplification of income tax rates. He promises to spend \$1.3 trillion on tax cuts over a 10-year period. The Texas Governor calls for an increase in the child tax cut to \$1,000 and the elimination of the estate tax by the year 2009. Moreover, Bush maintains raising the cap on corporate spending and also pledges to veto any bill concerning an increase in income taxes.

SPRING BREAK 2001
Jamaica, Cancun, Florida, Barbados, Bahamas.
Now Hiring Campus Reps. Earn 2 Free Trips.
Free Meals... Book by Nov. 2nd. Call for FREE Info
pack or visit on-line sunspashtours.com
1-800-426-7710

**GOT THE
BACK
TO SCHOOL
BLUES?**

WE'VE GOT THE CURE...

**COLD
HARD
CASH!**

WORK PART-TIME AT



PACKAGE HANDLERS
\$8.50-\$9.50/hour
PLUS BENEFITS!

APPLY ON-LINE AT:
www.upsjobs.com

OR CONTACT
UPS EMPLOYMENT AT:
781-551-2542

Equal Opportunity Employer



Vacuum Pumps, Systems and Equipment

Activac Technology
is your local
representative for:

Free pick up and delivery of
rotary pump exchanges.

BOC Edwards	vacuum pumps, instruments and systems
Hidden Analytical	mass spectrometry and residual gas analysis
Huntington Labs	hardware, fittings, positioners and manipulators
NuVacuum Systems	vacuum systems up to 10 feet in diameter
Manitou Systems	rf and dc power supplies

Call Nigel Cotton at 888/205-2500 • email nigelc@activac-technology.com

SPRINGBREAK 2001

Hiring On-Campus Reps
SELL TRIPS, EARN CASH, GO FREE!!!
Student Travel Services
America's #1 Student Tour Operator
Jamaica, Mexico, Bahamas, Europe, Florida
1-800-648-4849
www.gospringbreak.com

5 Years Later, Berenson Awaits Civilian Trial

By Shankar Mukherji
STAFF REPORTER

In the latest development of former MIT student Lori Berenson's nearly five year saga in the Peruvian justice system, President Alberto Fujimori has committed to new elections in which he will not be a candidate. Though it is still unclear how this will impact Berenson's case, it is clear that the 30 year old's story was among the many factors which effectively toppled the Fujimori regime.

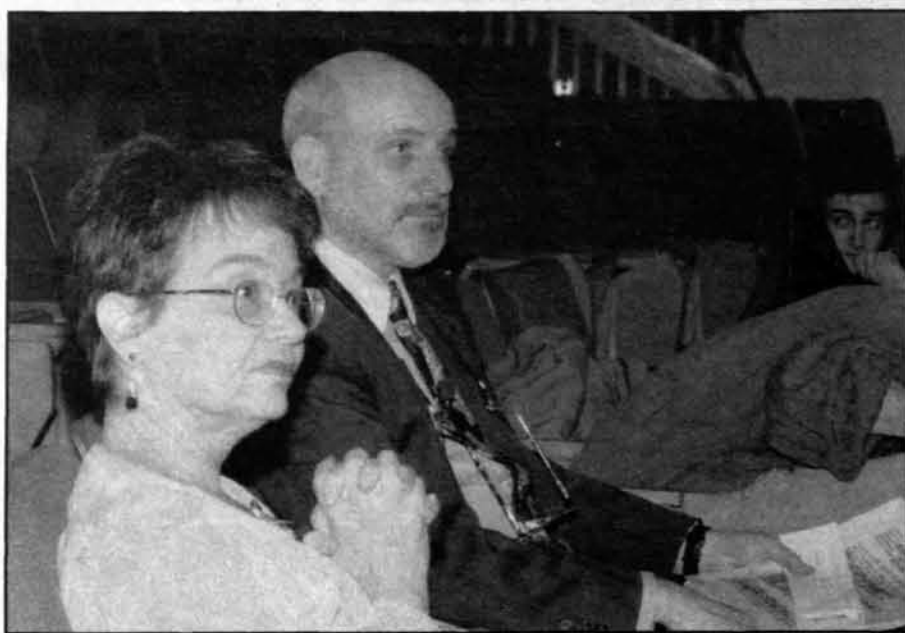
On the 17th of September, a day after a videotape surfaced showing intelligence chief Vlademiro Montesinos offering a bribe to a Peruvian congressman, Fujimori called for "new and immediate elections." The stunning event capped two months of mounting international pressure with the intention of ending the current autocratic government's hold on power. Sensing Fujimori's vulnerability, supporters of the "Free Lori" campaign have redoubled their efforts to see that the human rights activist is given a fair trial and, ultimately, brought home.

On August 28, the military court system of Peru annulled Berenson's life sentence and turned the matter over to the civilian courts, which may ultimately restore her freedom. Berenson, a U.S. citizen, was tried on charges of treason as defined in Peru's controversial anti-terrorist legislation. Though no longer facing the "hooded" judges of the military courts, she will still have to face civilian courts which, the United States State Department believes, "do not meet internationally accepted standards of openness, fairness, and due process."

Lori's parents, Mark and Rhoda Berenson, have voiced similar concerns, saying in a press release that, "[We] do not believe it would be possible for Lori to get a fair trial in Peru, even though she is innocent."

Born and raised in New York City, Lori Berenson attended the LaGuardia High School of Music and Art before coming to MIT. Attracted by the Department of Anthropology, she became a student of the late Professor Martin Diskin, an expert on land reform in Central America. She subsequently left MIT to work for the Committee in Solidarity with the People of El Salvador (CIS-PES) and, in 1990, moved to Nicaragua to work in the Salvadorian refugee community. After the signing of the Accords of Chapultepec in Mexico City, ending over a decade of fighting between the Salvadorian government and guerilla forces, Lori moved to El Salvador in January of 1992.

In November of 1994, Berenson travelled



Mark and Rhoda Berenson were at a forum on campus in April to raise awareness of the campaign to secure their daughter's release.

to Peru, where she was fascinated by the rich indigenous history. After renting an apartment in the Lima neighborhood of San Borja, she obtained press credentials and secured assignments from two American publications, *Modern Times* and *The Third World Viewpoint*. In Peru, Lori interviewed both members of Congress and leaders of rebel movements, wanting to get a wide variety of views represented in the press. It was her work as a journalist that first brought her into contact with the Tupac Amaru Revolutionary Movement (MRTA), which made international headlines when it seized control of the Japanese ambassador's residence in the Peruvian capital in December 1996.

On November 30, 1995, Lori Berenson, along with about 20 members of the MRTA, including the group's second-in-command Miguel Rincon, was arrested after an all-night shoot out with law enforcement authorities. She was charged with "aggravated treason against the Fatherland." The police allegedly found diagrams, notes, and weapons at a safe house which Berenson was claimed to have rented for the terrorists. Following a speedy trial presided over by a hooded, military court judge whose identity was not revealed, and in which Berenson's attorneys were not allowed to cross-examine prosecution witnesses, she was sentenced to a life term in Yanamayo Prison, situated high in the cold Andean plateau.

Prison life for Lori was made especially difficult; for the first year she was to serve in solitary confinement, and her only outside contact was with the guard who brought her food. Appeals in January and March of 1996 were summarily rejected and even President Bill Clinton's May 21st visit to Peru failed to

further Berenson's crusade for justice. In the mean time, however, Berenson's cause began to attract international attention from human rights groups. In November of 1997, Berenson was awarded with the Office of Americas Peace and Justice Award "for [her] dedication and zeal in promoting peace with justice in the Americas." Furthermore, Amnesty International initiated two "Urgent Action" letter campaigns on her behalf. In October of 1998 she was transferred to Socabaya Women's Prison in Arequipa for medical tests.

Activists from the Reverend Jesse Jackson to MIT Institute Professor Noam Chomsky have rallied to Berenson's cause. Lori Berenson, writes Chomsky, "eminently qualifies as a prisoner of conscience ... [and is] an inspiring symbol of countless people throughout the world who seek a measure of the freedom and rights that they deserve." A majority of the House of Representatives and 43 Senators have sent letters to President Clinton urging him to secure the release of Berenson.

As Lori's case enters a new critical phase, several groups are actively involving themselves in her cause. MIT's chapter of Amnesty International is planning to host a speaker on the subject, and the Committee to Free Lori Berenson's website (<http://www.freelori.org>) is registering nearly a quarter-million hits a day. Berenson's case is expected to come before the civilian court within the next two months.

This Week in MIT History

Katherine H. Allen

STAFF WRITER

This week in 1957, the MIT Skydiving Club formed. Fifty men and two women attended a lecture by champion skydiver Captain Jacques Istel, hosted by the Textile Division of the Mechanical Engineering Department.

Captain Istel described the new sport of skydiving to his listeners, including the maneuvers required during free-fall, which he asserted was "like flying, (or) being immersed in very light water." Prior to speaking at MIT, the captain spoke at Harvard, Yale, Bates, Princeton and Williams, inspiring skydiving clubs at each. The MIT crowd reacted similarly, and was excited about the easily available aircraft through the MIT flying club. Three Theta Xi brothers, Charles Negrin '60, John Cadwallier '60, and Ted Ansbacher '60, founded the MIT Skydiving Club shortly after, and it grew from those three to a small group of about 12.

Today, the MIT Skydiving Club is affiliated with the Massachusetts Sport Parachute Club, based in Jumptown, Massachusetts, the birthplace of sport parachuting. They offer tandem as well as single jumps, with prices ranging from \$300 for a free-fall first-jump, to \$40 for a fourth jump in the static-line training program. More information is available on their website, <<http://web.mit.edu/afs/athena.mit.edu/activity/s/skydive/www/index.html>>.

Strategy and New Venture Associate Opportunities



Cambridge Strategic Management Group

CSMG IS A RAPIDLY GROWING INTERNATIONAL STRATEGY AND ECONOMIC ADVISORY FIRM WHOSE CLIENTS INCLUDE START-UPS AND AGGRESSIVE, ESTABLISHED ENTERPRISES IN THE COMMUNICATIONS, INTERNET, HIGH-TECHNOLOGY, AND VENTURE CAPITAL INDUSTRIES.

CSMG CORDIALLY INVITES YOU TO VISIT OUR BOOTH AT
MIT's GRADUATE CAREER FAIR

SEPTEMBER 28TH, 2000

10AM - 4PM

ROCKWELL CAGE - BLDG. W33 MIT CAMPUS

* APPLICATIONS DUE TO CSMG BY OCTOBER 9TH, 2000

CSMG WILL ALSO BE HAVING AN INFORMATION SESSION
AND RECEPTION AT **CAMBRIDGE CENTER MARRIOTT**

OCTOBER 16TH

6:45 - 8:45 PM

www.csmgusa.com

Expand Your Mind. Come to Columbia.

Visiting Students

Take a break. Spend a semester at Columbia. Explore New York City.

Study Abroad

• Columbia University in Paris • Berlin Consortium for German Studies • Summer Program in Italy (Scandiano) • Summer Program in Beijing

Summer Session 2001

Join us for an exciting summer! It's not too early to plan for 2001. The bulletin will be available in February—reserve yours today.

(212)854-6483
cesp-info5@columbia.edu
www.ce.columbia.edu/ys



Columbia

CONTINUING EDUCATION AND SPECIAL PROGRAMS

With one touch
Un-Zap Pad
protects your
computer from the
harmful effects of
static electricity.



Only \$11.95 (Includes all shipping charges)

► Mail this form with check, money order or credit card info to:

E-mat
PO Box 1997
Holmes Beach, FL 34218

► Fax this form with credit card info to 877-721-8734
► Call your order in 877-511-3628
► email your order to (include credit card):
antistaticmat@aol.com

Name: _____
Address: _____
Address: _____
City: _____ ST _____ Zip _____
Credit Card # _____
Credit Card Expiration Date: _____
Check Enclosed: ☐ check here

You can. You will.



Change everything.

Why? Because it's not how much experience you have, it's about your drive and ambition. SAP Labs gives recent college graduates the opportunity to grow in a career designed for success. Whether your specialty is software development or quality assurance, your solutions enable not only better communication between businesses and their clients, but also between everyone involved in running a successful company. At SAP Labs we thrive in a young, casual environment where projects are team focused, and training and support are ongoing. You'll not only be making a difference in the business world; you'll have the freedom you've always wanted in your career. It just comes with the territory.

In return for your skills and experience, we offer you the chance to grow and thrive in a motivating and personal atmosphere. We also provide an outstanding benefits package including three weeks vacation, flex hours and more. If you are interested in a position in any of these areas, please e-mail your resume to: L-UMT@jobsatsaplabs.com.

We currently have the following positions available:

Software Development • Quality Management
Regional Industry Group • Product Management

For further position details and inside information on the hottest business applications software in the world, visit: www.saplabs.com/usa.

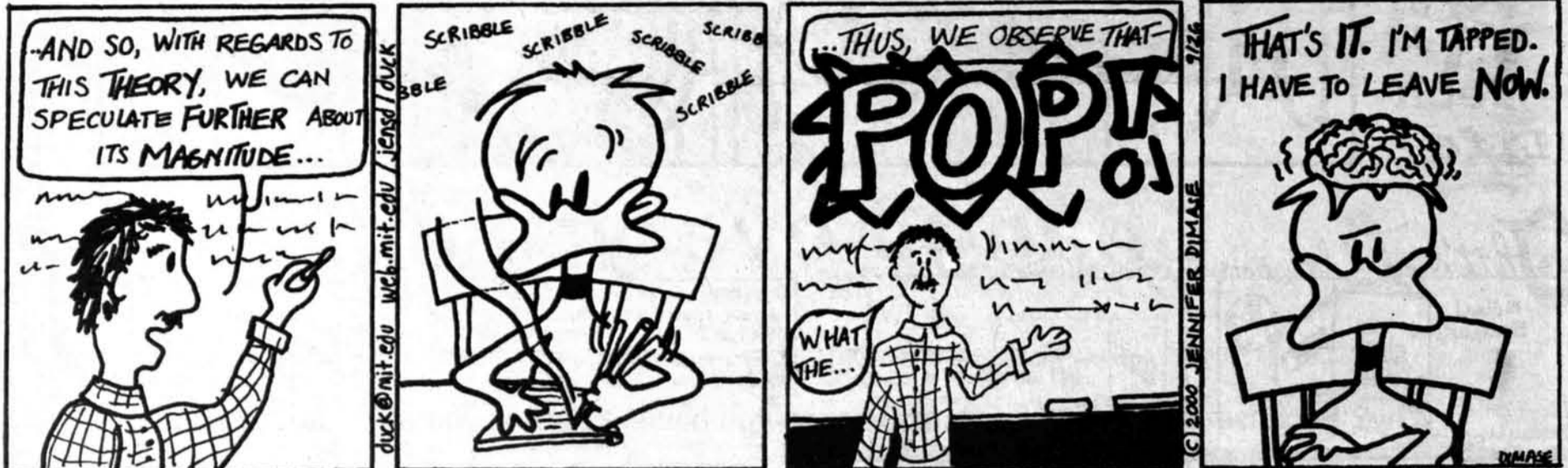


www.saplabs.com/usa

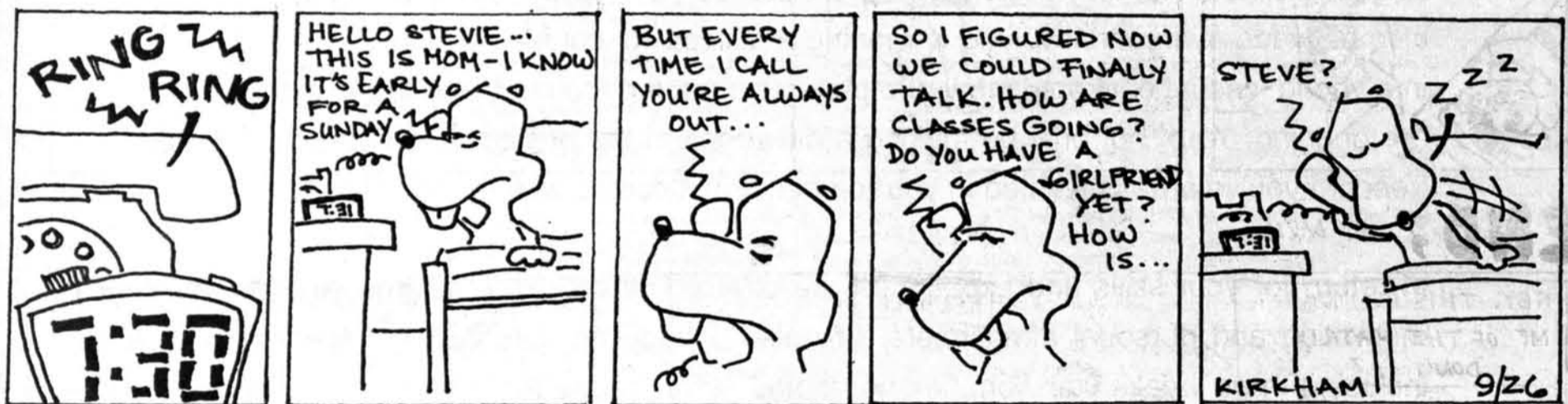
(We are proud to be an Equal Opportunity Employer.)

Down with Science

by Jennifer DiMase



the crass rat



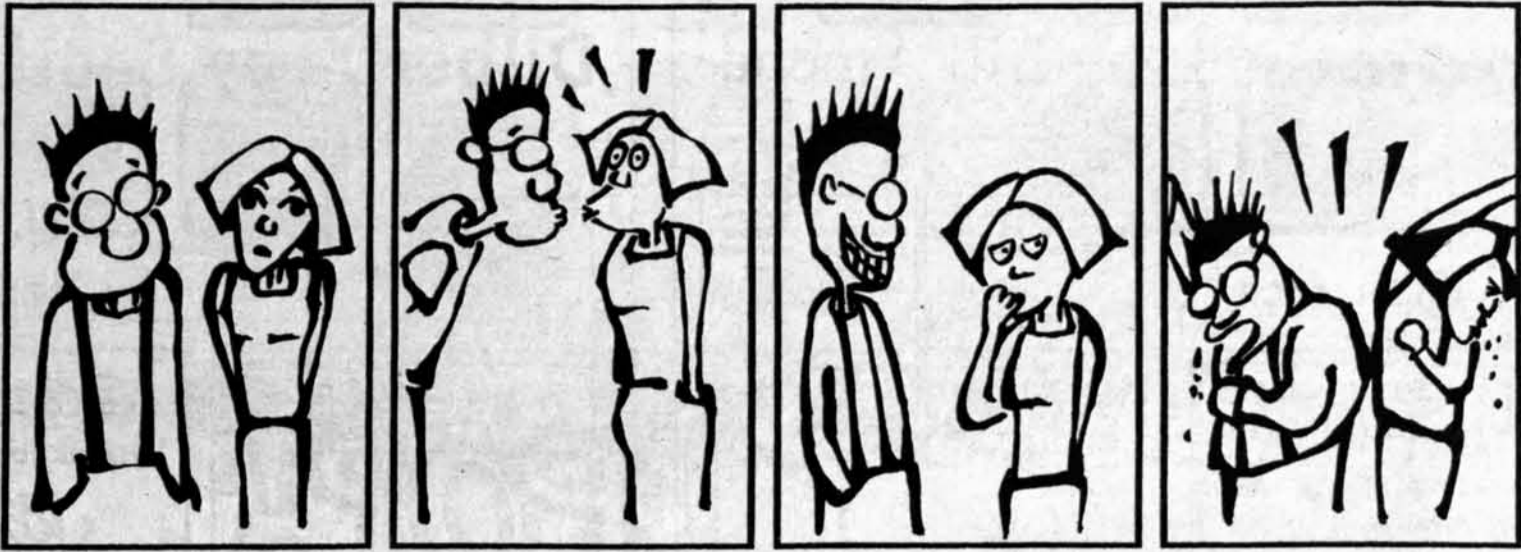
INSTITUTE MADNESS!

ALISON WONG



By Guan-Jong (John) Chen

Tech
Life



That's Life

life@hotmail.com



END; BY DAVID



THE REAL WORLD

Crossword Puzzle

- ACROSS
- 1 Unruly rascal
 - 5 Happy starter?
 - 9 Annexed
 - 14 Mine vein
 - 15 Corn concoction
 - 16 Cautious
 - 17 Chief Norse god
 - 18 Rosalind Russell role
 - 20 Balance on the brink
 - 22 Sports venues
 - 23 "Semper Fidelis" composer
 - 24 Specified portions
 - 27 Ridicule
 - 29 Gridlock
 - 33 ___ Royale
 - 37 Itemized accounts
 - 39 Miscellany
 - 40 Prison knife
 - 41 Additional
 - 42 Anglers' needs
 - 43 Astronauts' grp.
 - 44 Reef base
 - 45 Dates
 - 46 Macbeth's title
 - 48 Diplomacies
 - 50 Other than
 - 52 Builder's maps
 - 57 Mount in the Cascades
 - 60 Formosa, today
 - 61 Small accordion
 - 65 Matching
 - 66 Like Cheerios
 - 67 Ireland
 - 68 Bubble maker
 - 69 Carpus
 - 70 Small snakes
 - 71 Bill-topper
- DOWN
- 1 Ink stains
 - 2 Calgary Stampede, e.g.
 - 3 Nice good-bye?
 - 4 Hikers' shelters
 - 5 Practice punches
 - 6 Singer Reed
 - 7 Advice-giving Landers
 - 8 House cat
 - 9 Warrs
 - 10 Bearings
 - 11 Rusk or Martin
 - 12 Ms. Bombeck
 - 13 Color changers
 - 19 James Bond's
 - 21 Break bread
 - 24 Don ___ de la Mancha
 - 25 Remove sandals
 - 26 Exercise a pull
 - 28 One Baldwin
 - 30 Spiny African plant
 - 31 Take the bus
 - 32 Setback
 - 33 "___ It a Pity"
 - 34 Persian ruler
 - 35 Actress Kudrow
 - 36 Dissipates like vapor
 - 38 Weapons talks, briefly
 - 47 Range
 - 49 Hot tub
 - 51 Vehicle
 - 53 Speech impediments
 - 54 Stand by
 - 55 MacDill AFB site
 - 56 Look of contempt
 - 57 Flat-bottomed boat
 - 58 Rime
 - 59 Opposed to

1	2	3	4	5	6	7	8	9	10	11	12	13
14				15				16				
17				18				19				
20				21				22				
23					24	25	26					
				27	28			29		30	31	32
33	34	35	36		37			38		39		
40					41					42		
43					44					45		
46					47			48		49		
				50	51				52	53	54	55
57	58	59						60				
61					62	63	64			65		
66					67					68		
69					70					71		

1999 Tribune Media Services, Inc. All rights reserved.

60 Brown shades
62 Assam or darjeeling

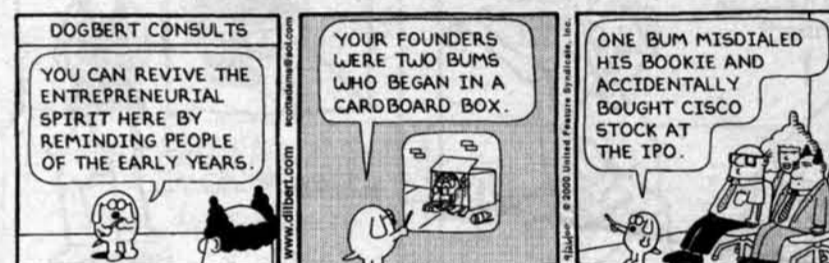
63 Tax grp.
64 Wee dram

Solutions, page 30

FoxTrot — by Bill Amend



Dilbert® by Scott Adams



TechCalendar

Visit and add events to TechCalendar online at <http://tech-calendar.mit.edu>

Tuesday, September 26

- 6:00 a.m. - 5:59 a.m. - **Here and Away.** Exhibition of photographs and artwork created by staff members of Technique, the MIT yearbook. Contributors include MIT students and recent alumni, each of whom presents two works: one with a theme of MIT, student life, or the Boston area and the other with a topic outside of the Institute. free. Room: Wiesner Student Art Gallery (2nd floor Student Ctr). Sponsor: Technique Yearbook.
- 9:00 a.m. - 5:00 p.m. - **Mary A. Harman: Breaking the Mold.** A series of images using multiple print processes to explore issues of women's individuality and saneness. free. Room: Rm E52-466. Sponsor: Sloan School of Management.
- 10:00 a.m. - 5:00 p.m. - **Flashes of Inspiration: The Work of Harold Edgerton.** An interactive exhibition celebrating the life and work of MIT legend Harold. \$5; \$2 students/seniors; \$1 children 5-18; free with MIT ID. Room: MIT Museum, N52 2nd floor. Sponsor: MIT Museum.
- 12:00 p.m. - 2:00 p.m. - **Travelling to the Land of Materials in 18th-Century France.** free. Room: Dibner Institute. E56-100. Sponsor: Dibner Institute.
- 12:00 p.m. - 1:00 p.m. - **Word User Group.** The MIT Microsoft User Group (WUG) was formed for people at MIT, from beginners to experts, who are using or interested in learning to use Microsoft Word word processing software. free. Room: N42 Demo Center. Sponsor: Information Systems.
- 12:00 p.m. - 2:00 p.m. - **Travelling to the Land of Materialism in 18th-Century France.** Please contact if you plan to attend: dibner@mit.edu OR 253-6989. free. Room: E56-100. Sponsor: Dibner Institute.
- 12:00 p.m. - 1:00 p.m. - **How Entrepreneurs and Start-ups Finish First in Japan.** Terrie Lloyd is a leading serial entrepreneur in Tokyo. He started six companies in the last 17 years there. He currently runs one of the largest job recruiting sites and Japan's leading English-language business magazine, J@pan.Inc. Find out about: Opportunities for US entrepreneurs and high tech firms, the technology and business niches that show the most promise, and what it takes to get started. free. Room: E51-095, Tang Building. Sponsor: MIT Japan Program.
- 12:00 p.m. - 1:00 p.m. - **Biomedical Functional Imaging with Light Scattering Spectroscopy.** free. Room: Marlar Lounge 37-252. Sponsor: Research Lab of Electronics, Spectroscopy Laboratory. Rowland Institute for Science.
- 4:00 p.m. - 5:00 p.m. - **Viscous Heating and the Stability of Newtonian and non-Newtonian Taylor-Couette Flow ouette Flow.** free. Room: 3-133. Sponsor: Fluid Mechanics Seminars.
- 4:00 p.m. - 5:00 p.m. - **An Interdisciplinary Approach to Architecting New DSP Features.** MTL VLSI Seminar Series. free. Room: 34-101 (Refreshments at 3:30). Sponsor: Fluid Mechanics Seminars.
- 4:00 p.m. - 5:00 p.m. - **Viscous Heating and the Stability of Newtonian and non-Newtonian Taylor-Couette Flow.** Fluid Mechanics Seminar. free. Room: Room 3-133. Sponsor: Fluid Mechanics Seminars.
- 4:00 p.m. - 5:00 p.m. - **Fluid Buckling.** free. Room: Room 3-133. Sponsor: Fluid Mechanics Seminars.
- 4:00 p.m. - 5:00 p.m. - **Energy-efficient Wireless Networking.** Abstract: There is increased interest in energy efficiency in wireless networks. What is fairly new is that energy savings can be achieved through choice and design of network protocols. In this talk, we will review three different ways in which network design choices impact energy efficiency. The first deals with choice of transmission power in random access environments. The second considers ad-hoc network multicasting. And the third looks at the detector structure in the context of multi-user detection and shows the savings achieved by successive interference cancellation. free. Room: Laboratory for Information and Decision Systems, room 35-225. Sponsor: LIDS Colloquium.
- 4:30 p.m. - **"Migration and Mortality in the North Korean Famine".** free. Room: E38-615. Sponsor: Center for International Studies.
- 4:30 p.m. - 6:00 p.m. - **"Brane Charges in Background Fluxes".** free. Room: Room 4-231 at MIT. Sponsor: Harvard-MIT Mathematical Physics Seminar.
- 5:30 p.m. - 7:00 p.m. - **Financial Aid for Graduate School.** This workshop will provide information on applying for fellowships for graduate school. free. Room: 1-134. Sponsor: National Society of Black Engineers.

Wednesday, September 27

- 6:00 a.m. - 5:59 a.m. - **Here and Away.** Exhibition of photographs and artwork created by staff members of Technique, the MIT yearbook. Contributors include MIT students and recent alumni, each of whom presents two works: one with a theme of MIT, student life, or the Boston area and the other with a topic outside of the Institute. free. Room: Wiesner Student Art Gallery (2nd floor Student Ctr). Sponsor: Technique Yearbook.
- 9:00 a.m. - 5:00 p.m. - **Mary A. Harman: Breaking the Mold.** A series of images using multiple print processes to explore issues of women's individuality and saneness. free. Room: Rm E52-466. Sponsor: Sloan School of Management.
- 10:00 a.m. - 5:00 p.m. - **Flashes of Inspiration: The Work of Harold Edgerton.** An interactive exhibition celebrating the life and work of MIT legend Harold. \$5; \$2 students/seniors; \$1 children 5-18; free with MIT ID. Room: MIT Museum, N52 2nd floor. Sponsor: MIT Museum.
- 12:00 p.m. - 1:30 p.m. - **Overview of Purchasing on the Web.** This demo integrates all aspects of using SAPweb for purchasing including requisitioning external vendors, internal providers and preferred partners. In this session we will introduce the SAPweb requisitioning form, the new online catalogs and purchasing procedures for buying from preferred partner vendors. free. Room: N42 Demo Center. Sponsor: Information Systems.
- 12:00 p.m. - 1:30 p.m. - **The Terrorist Threat and U.S. Response.** free. Room: E38-615. Sponsor: Security Studies Program.

TechCalendar appears in each issue of *The Tech* and features events for members of the MIT community. *The Tech* makes no guarantees as to the accuracy of this information, and *The Tech* shall not be held liable for any losses, including, but not limited to, damages resulting from attendance of an event. Contact information for all events is available from the TechCalendar web page.

- 12:10 p.m. - 1:10 p.m. - **Physical Oceanography Sack Lunch Seminar.** Relative Dispersion in the North Atlantic Joe LaCasce, WHOI. free. Room: 54-915. Sponsor: Physical Oceanography.
- 3:00 p.m. - 5:00 p.m. - **spouses&partners@mit weekly meeting.** Boston by Slide: This is a lecture and slide show on "The Four Shapes of Boston" which traces the city's topography and architecture from 1630 to the present in four chapters: Surviving (the Colonial Period), Settling (the Federal Period), Spreading (the Victorian Period), and Soaring (the Contemporary Period). Childcare provided. free. Room: W20-400. Sponsor: spouses&partners@mit, MIT Medical.
- 4:00 p.m. - 5:00 p.m. - **Nanostructures Seminar Series.** "Electronic Processes in Doped Molecular Organic Semiconductors". free. Room: 34-401 (Refreshments served at 3:30 pm). Sponsor: Nanostructures Laboratory.
- 4:15 p.m. - 5:30 p.m. - **A theorem of log-concavity or inequalities for elementary symmetric polynomials.** free. Room: Room 2-338. Sponsor: Combinatorics Seminar. Department of Mathematics.
- 6:30 p.m. - 7:15 p.m. - **MITgaard Weekly Meeting.** What to wear: Costuming for the SCA. Come learn about Renaissance clothing. Chainmail supplies and instruction also available. free. Room: Student Center, PDR#3. Sponsor: Society for Creative Anachronism.
- 7:00 p.m. - 8:30 p.m. - **How to Get Your Dream Job.** free. Sponsor: Sloan Undergraduate Management Association. Collegehire.
- 8:00 p.m. - **Highlights from Musicals at MIT.** Nine MIT affiliates present 18 selected scenes from hit Broadway shows. Directed by Caroline McEnnis '03 and Cemocan S. Yesil '03; vocal director Anne Rhodes (sr office asst, Dept of Architecture), musical director Katherine Bryant. free. Room: Killian Hall. Sponsor: Music and Theater Arts Section.
- 8:00 p.m. - 10:00 p.m. - **International Film Club Film Seminar.** Consult our web page for this weeks title: <http://web.mit.edu/iffilm/www>. free. Room: 4-237. Sponsor: Graduate Student Council, International Film Club.

Thursday, September 28

- 6:00 a.m. - 5:59 a.m. - **Here and Away.** Exhibition of photographs and artwork created by staff members of Technique, the MIT yearbook. Contributors include MIT students and recent alumni, each of whom presents two works: one with a theme of MIT, student life, or the Boston area and the other with a topic outside of the Institute. free. Room: Wiesner Student Art Gallery (2nd floor Student Ctr). Sponsor: Technique Yearbook.
- 9:00 a.m. - 5:00 p.m. - **Mary A. Harman: Breaking the Mold.** A series of images using multiple print processes to explore issues of women's individuality and saneness. free. Room: Rm E52-466. Sponsor: Sloan School of Management.
- 10:00 a.m. - 5:00 p.m. - **Flashes of Inspiration: The Work of Harold Edgerton.** An interactive exhibition celebrating the life and work of MIT legend Harold. \$5; \$2 students/seniors; \$1 children 5-18; free with MIT ID. Room: MIT Museum, N52 2nd floor. Sponsor: MIT Museum.
- 12:00 p.m. - **Combining Behavioral Methods with Neurophysiology.** Prof. Ethan Markus of University of Connecticut, shares his current research. Title of lecture above will be updated when available. More information on Prof. Markus can be found at <http://psychlops.psy.uconn.edu/Markus>. Hosted by Prof. Matthew A. Wilson. CLM Plastic Lunch Seminar Series. Every other Thursday at noon one of the Faculty of Center for Learning and Memory hosts a speaker to discuss research related to CLM's mission: to decipher molecular, cellular, neuronal ensemble, and brain systems mechanisms underlying Learning and Memory and associated cognitive functions such as perception, attention and consciousness. Sponsor: Center for Learning and Memory.
- 1:00 p.m. - **Structural Morphologies.** Series of three talks sponsored by the Departments of Architecture and Civil and Environmental Engineering. free. Room: Kresge Auditorium. Sponsor: Department of Architecture. Department of Civil and Environmental Engineering.
- 3:00 p.m. - 5:00 p.m. - **Experiences in Interactive Expression.** Open discussion by visiting artists highlighting the history of interactive digital art & contemporary issues in the field. free. Room: Rm N52-390. Sponsor: Center for Advanced Visual Studies.
- 4:00 p.m. - 5:30 p.m. - **Summer Experiences that Paid Off: Insider Information.** free. Sponsor: Class of 2001, Graduate Student Council, Society of Women Engineers, Sloan Undergraduate Management Association.
- 4:00 p.m. - 5:00 p.m. - **Feedback Approaches to Dynamic Traffic Assignment and Route Guidance.** Refreshments to follow in E40-106. free. Room: E51-361. Sponsor: Operations Research Center.
- 4:00 p.m. - 5:00 p.m. - **Future Directions in Ocean Carbon Cycle Modeling.** free. Room: Rm 54-915. Sponsor: MIT Atmospheric Science Seminars.
- 4:15 p.m. - 5:15 p.m. - **EXPERIMENTS AND DIAGNOSTICS TO UNDERSTAND OIL CONSUMPTION N PRODUCTION SPARK IGNITION ENGINE.** Refreshments at 4:00. free. Room: 31-161. Sponsor: Sloan Automotive and Reacting Gas Dynamics Labs.
- 6:00 p.m. - 7:00 p.m. - **Event Planning Workshop.** This workshop is offered to anyone in the MIT community who needs help navigating through the Event Registration Process. We will also offer some helpful event planning ideas and tips. free. Room: 4-237. Sponsor: Student Activities Staff.
- 7:00 p.m. - 9:00 p.m. - **Launch of MIT CogNet & Harry Bradford Stanton Lecture.** A leading Cognitive Scientist launches MIT Cog Net with a talk entitled "Does Our Language Affect the Way We Think?" The Harry Bradford Stanton lecture celebrates the legacy of Bradford Books' founder. Bradford Books is an imprint of MIT Press. Reception follows. free. Room: Wong Auditorium, E51, Amherst & Wadsworth Sts. Sponsor: authors@mit. MIT Dept of Brain & Cognitive Sciences, and The MIT Press.



unlimited

Join one of the fastest
growing investment banks in the world

Are you looking for a dynamic and rewarding career in investment banking? Do you want to be in a job with a lot of responsibility and opportunity? Do you want to work in an environment where achievement and reward are naturally connected? Then you should consider joining the UBS Warburg team.

We are accepting resumes from the Class of 2001 interested in a full time position within our Information Technology and Sales & Trading divisions.

Interviews will be held on Friday, October 13, 2000.

We welcome those interested to apply via your career services office by Friday, September 29, 2000.

www.ubswarburg.com



Global careers in
investment banking

UBS Warburg is a financial services group of UBS AG. In the United States, UBS Warburg LLC, a subsidiary of UBS AG, is a member of NYSE and SIPC. UBS Warburg is an Equal Opportunity Employer.

Brience Attracts \$200 Million Golder Financing.

- San Francisco Chronicle / April 11, 2000

Here's \$200 Million. Go Innovate.

- eCompany / May 5, 2000

Want to work with pioneers
in The Broadband & Wireless
software space?



Hiring for all positions:

- Alliance Managers
- Application Architects
- Application R&D Managers
- Business Analysts
- Computer Systems Analysts
- Concept Architects
- Data Architects
- Functional Analysts
- Infrastructure Architects
- Java/ EJB / JSP/ Servlets Developers
- Programmer Analysts
- Project Managers
- Quality Assurance Engineers
- Quality Assurance Managers
- Senior Software Consultants
- Senior Software Developers
- Senior Software Engineers
- Software Architects
- Software Consultants
- Software Developers
- Software Engineers
- Software Technologists
- Technical Writers

Contact Info:

Marc Moss, VP, Recruiting
415.644.3247 mmoss@brience.com

128 Spear Street, Third Floor San Francisco CA 94105 | office: 415.974.5300 | fax: 415.974.5310 | www.brience.com

○○○○● Brience

WANTED:**Explorers****Investigators****Independent Thinkers****Influencers**

As a nature lover, Kim spends vacations unearthing signs of wildlife that most people never notice. As an equity research analyst, she uses the same intensity to reveal unique insights into the chemical industry. What are you seeking to discover?

**MINDS.
WIDE
OPEN.**

Wednesday, September 27th, 2000

Firmwide Information Session

All undergraduate students are welcome

6:00 P.M. – 9:00 P.M.

Marriott Cambridge

Two Cambridge Center

Corner of Broadway & Third Street

**Goldman
Sachs**

MINDS. WIDE OPEN.SM
www.gs.com

Get your theories a job.

D. E. Shaw & Co., L.P. is a specialized investment firm. It was organized in 1988 to explore various aspects of the intersection of technology and finance. Today, the D. E. Shaw group encompasses about a dozen closely related entities with approximately \$1 billion in aggregate capital, but the core of our business remains the same: sophisticated algorithms that move hundreds of billions of dollars a year.

Understandably, we put a premium on mathematical and analytical skills; our staff includes Putnam Prize-winners and Math Olympiad champions. But we also want creative, pragmatic, articulate people who aren't afraid to implement—and manage—what they invent. In fact, our firm is largely run by the people who designed our strategies and systems.

**D. E. Shaw & Co. will be holding an information session on
Wednesday, September 27 at 7 PM in 4-153.**

Broker-dealer activities of the D. E. Shaw group are conducted in the United States through D. E. Shaw Securities, L.P., D. E. Shaw Investments, L.P., or D. E. Shaw Valence, L.P., which are registered as broker-dealers with the United States Securities and Exchange Commission and are members of the National Association of Securities Dealers, Inc. Investment advisory activities are conducted through D. E. Shaw & Co., L.P.

The D. E. Shaw group does not discriminate, in matters of hiring or promotion, on the basis of race, color, religion, gender, national origin, age, military service eligibility, veteran status, sexual orientation, marital status, or disability.

New Officers Express Concerns Over Voter Turnout

Elections, from Page 1

Freshman Outdoor Program. Kim, a member of the Freshman Urban Program, beat out Parul Deora '04, a member of FLP, whose posters were noteworthy for their yellow "Caution" tape.

More vote than in last year

Significantly more ballots were cast in this year's election than in last year's, in which only 182 freshmen voted and publicity was generally considered inadequate.

However, despite the relatively high turnout this year, many freshmen were not aware that voting was going on. "I didn't know about it until my friend asked me on Friday night if I had voted," said Sonya C. Tang '04. "Hopefully in the future, Class Council will keep the freshman class better informed than we were about this election."

Pamela V. Chang '04 felt that the UA could have provided more publicity for the elections. "I saw posters for the candidates, but I never saw any signs with the date of the election," Chang said.

Others did not vote because they believed that they could only vote online. "I didn't vote because I had a problem getting my certificates," said Sarah E. Smith '04. "I didn't know about paper balloting."

Still others just never got around

to voting. "I didn't vote because I missed the deadline," said Roberta L. Hsu '04. "I had a lot of work to do that night. I was planning to vote."

Sisir Botta '04 also did not vote. "I was planning to vote on Friday, but I had to go to the IFC (Interfraternity Council) retreat," Botta said.

Daniel Lee '04 said that he didn't vote because "I didn't know any of the people running." Lee said he wasn't aware that the candidates had posted platform statements on the web.

"I asked each of my friends to get two or three people to vote for me, to physically take them to the computer and have them vote," said Kim, the new Class of 2004 President. "It's really easy to get people to make promises, but actually physically voting is another thing."

New officers address turnout

Voter turnout is a major concern for the new Council. "It's normal that a lot of people didn't vote, but it's not right," said Smith, one of the new Publicity Chairs. "Everyone has a voice and everyone's voice is equally important, but not everyone is as vocal about it as everyone else."

Smith, Keuss, and Planck, the three Publicity Chairs, have decided to reach out to freshmen through living groups. "Freshmen should have people they can go to in their

living groups to communicate with us," said Smith.

The Publicity Chairs plan to make their e-mail addresses known to the entire freshman class. According to Smith, the publicity committee wants "to make people aware of the fact that [their class officers] do want to hear them."

"We can't force people to

speak," said Garrison, the Class Secretary, "but we can try to have surveys and info sheets for freshmen to fill out. They won't come looking for information. We have to get in their faces."

Pena, one of the new Social Chairs, still thinks the students need to get the ball rolling. "If they don't get out there and put forth an effort,

there's not much we can do."

Another major concern of the 2004 Council is class unity. "I want Study Breaks for us to get together, away from the stresses of MIT," Kim said. Kim plans to have "Theme Days," when all freshmen wear a funny hat or a sports shirt, as "just something that bonds us together."

We provide end-to-end solutions to some of the world's most successful companies. Join Genuity and your career gets the same attention.

If you'd like to learn more about a career with a leading provider of Managed E-Business Network Solutions, come to Genuity's information session.

Sloan - Tang Building
E51
3rd Floor

Tuesday, September 26; 12:00pm to 1:00pm

Genuity offers an exceptional salary and benefits package, as well as an intellectually charged, creative environment and outstanding opportunity for professional growth. For a complete listing of employment opportunities and job descriptions, please visit us at <http://www.genuity.com>. Please send resumes to: Genuity, Attn: University Relations, 150 Cambridge Park Drive, 9D, Cambridge, MA 02140; E-mail: college@genuity.com; FAX: (617) 873-5676. Diversity gives us the strength to lead - Equal Opportunity Employer M/F/D/V.

At Genuity (formerly GTE Internetworking and BBN) we offer businesses a full spectrum of Managed E-Business Network Solutions integrated with Tier-One infrastructure. By focusing on innovative business platforms, we help our customers achieve a competitive advantage in the new Internet economy.

GENUITY

The Tech News Hotline
253-1541

Highlights from Musicals

at MIT

"Do you hear
the people sing?"

... you will!

Nine MIT students and affiliates will dazzle audiences with two FREE performances of "Highlights from Musicals," a medley of music and dance from these popular and classic Broadway musicals:

Phantom of the Opera,
Annie Get Your Gun,
Les Miserables,
Fiddler on the Roof,
My Fair Lady,
Girl Crazy,
Guys & Dolls,
Hans Christian Andersen,
Chicago,
Chess,
Brigadoon,
and The Medium.

Free!
thanks to our
sponsors:



V i o s
Transforming the
Internet Experience
reserve your
free copy at
www.vios.com



Elevating e-commerce
to true commerce.
Visit us at the Career Fair!
or www.emptoris.com

WHAT Two FREE performances
of "Highlights from Musicals"

WHEN September 27th (Wed.)
& 29th (Fri.) at 8 p.m.

WHERE Killian Hall @ MIT
(1st floor, building 14W)



for RESERVATIONS or questions call 617-225-7210 or email musicals-dir@mit.edu

Whatever.

You'll find it at

shopcambridgeside.com



100 CambridgeSide Place • Cambridge, MA 02141
(617) 621-8666 • shopcambridgeside.com



Something to
feel good about.

United Way

This space donated by The Tech

web.mit.edu/seniorweek web.mit.edu/seniorweek web.mit.edu/seniorweek

Class of 2001: YOU'RE INVITED!

Date: Monday, 10/2
Time: 1:00 - 3:00
Price: FREE
Place: Bush Room
10-105

FREE SNACKS!!!

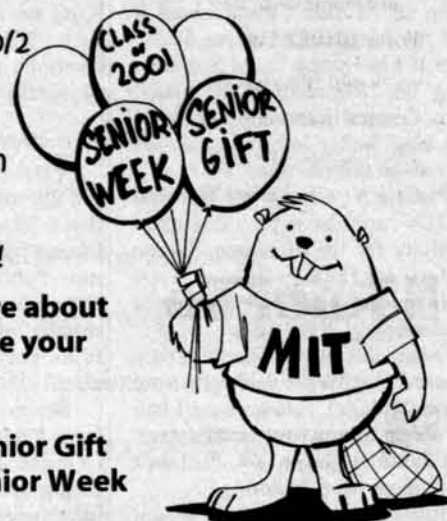
**Come find out more about
how YOU can shape your
final year at MIT!**

**Give back with Senior Gift
Celebrate with Senior Week**

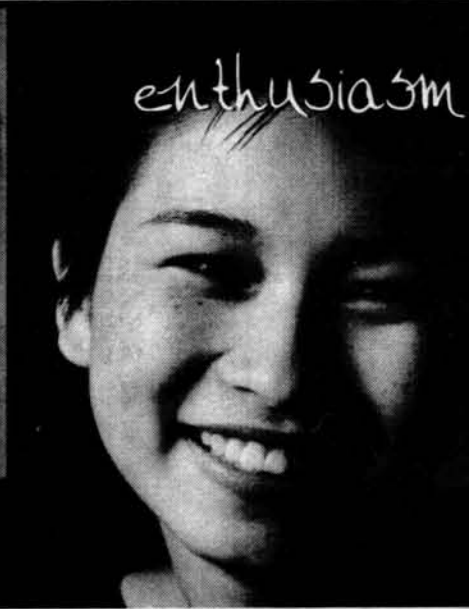
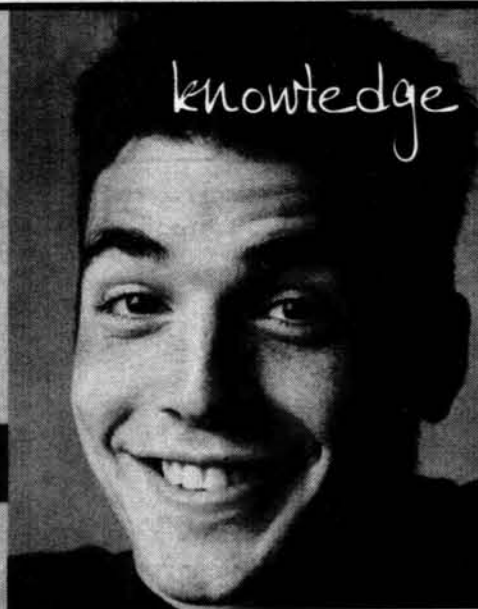
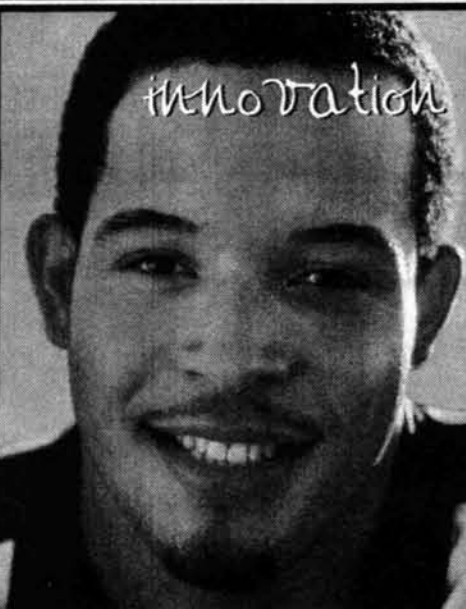
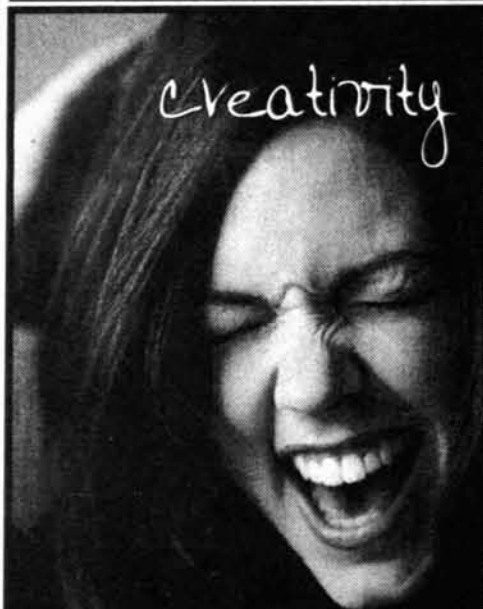
**Join a committee—make
your last year at MIT the
BEST!**

Sponsored by the MIT Alumni Association

web.mit.edu/senior-gift/ web.mit.edu/senior-gift/ web.mit.edu/senior-gift/



**SENIOR
SHOWCASE**



Bring It

Where it matters most.

As one of the world's leading diversified technology companies, we're breaking new ground in everything from **defense and commercial electronics**, and **business aviation and special mission aircraft**. As a Raytheon employee, you'll contribute to the development of exciting, revolutionary technology designed to make life better, easier, and safer throughout the world. Such as our *STARS* air traffic control system. And our award-winning *NightSight™* technology.

But it all starts with you. Your creativity. Your knowledge and innovation. And enthusiasm about the future. In return, we offer exceptional training and professional development opportunities. A supportive, down-to-earth work environment. And incredible benefits including flexible schedules designed to respect your quality of life.

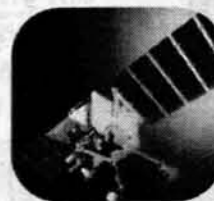
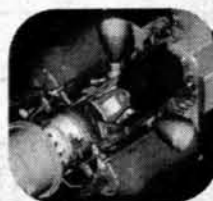
So you can still show off all those great qualities of yours outside of work, too.

We'll be visiting your campus soon — contact your career placement office to schedule an interview. If you are unable to meet with us, please send your resume to: **E-mail: resume@rayjobs.com** (ASCII text only; no attachments). **Raytheon Company, Attn: National Staffing Data Center, P.O. Box 660246, MS-201, Dallas, TX 75266.** U.S. Citizenship may be required. We are an equal opportunity employer.

Opportunities are available for exceptional students with the following majors:

- Computer Science
- Computer Engineering
- Electrical Engineering
- Mechanical Engineering
- Math
- Physics
- Chemical Engineering
- Aeronautical Engineering
- Finance/Accounting
- Human Resources
- Industrial and Labor Relations
- Marketing/Communications
- Management

Check out our Website at **www.rayjobs.com/campus** for further information including a calendar of recruiting events. At Raytheon, we strive to be the employer of choice for a diverse workforce by attracting, retaining, and recognizing the most talented, resourceful and creative people.



Bringing technology to the edge

Raytheon

Even EZ-er than 1040EZ.

Introducing TeleFile from the IRS. If you are single and filed Form 1040EZ last year, you can file your tax return in ten minutes by phone. Anytime. Check your tax booklet for information.

TeleFile
It's free. It's fast. It works.

Department of the Treasury
Internal Revenue Service
Changing for good.

This space donated by The Tech

Thanks to you, all sorts of everyday products are being made from the paper, plastic, metal and glass that you've been recycling. But to keep recycling working to help protect the environment, you need to buy those products.

BUY RECYCLED.



AND SAVE.

So look for products made from recycled materials, and buy them. It would mean the world to all of us.

For a free brochure, write
Buy Recycled, Environmental
Defense Fund, 257 Park Ave.
South, New York, NY 10010,
or call 1-800-CALL-EDF.

ENVIRONMENTAL
DEFENSE FUND



Ad Council
A National Member of
SEPA

This space donated by The Tech

ANOTHER ARTS SUCCESS STORY!!!!

(Next Grants Deadline: September 29 !!!!)



My days were filled with frustration - could anyone understand how I yearned to express myself artistically?

One day my office mate, Ted, seemed particularly full-filled....

Why so happy, Ted?

I just got funding for my video project!

Wow! How did that happen?

I applied to the Council for the Arts at MIT Grants Program!!

I stopped by E15-205, the Office of the Arts.

Just fill in this application and supply some supporting material...

How about my resume? And letters of recommendation?

About one month after the deadline, it was time to meet with a member of the Council to talk about my project

I brought a tape of my work and those updated budget figures you asked for!

My site visit with a Grants committee member went well. Encouraging? And how!

Bill, I am confident that your song cycle "Problem Sets", will have a great deal of relevance for MIT students....

The next day....



I got the Grant! Now my artistic yearnings won't wither and die due to lack of funds!

That's right! You too can be part of an
ARTS SUCCESS STORY!!!

Apply to the Council for the Arts
at MIT Grants Program!!!!!!

contact cohen@media.mit.edu for more
information, or go to:

<http://web.mit.edu/arts/grants.html>

3-8800 NIGHTLINE 3-8800
We're here to listen

Services
& Meals

Rosh HaShanana



Reform Services

MIT Chapel

Friday, Sept 29, 6:30 pm
Saturday, Sept. 30 10:30 am

Conservative Services

Kresge Little Theatre

Friday, Sept 29, 6:30 pm
Sat Sept 30, 8:45 am & 6:00 pm
Sunday, Oct 1, 8:45 a.m.

Free Rosh HaShanah Dinner

Open to all students
with reservation

Friday, Sept. 29
8:00 pm

Reserve by Sept 27 noon,
<hillelsvp@mit.edu>

More Holiday Meals

Rosh HaShana
Lunches & Second
Dinner
Reserve with Hillel
by Sept 27 noon.



Sponsored by:

MIT Hillel
Bldg W11
253-2982

MBTA to Construct Silver Line Tunnels



KARNA BASU

The MBTA's Crosstown 2 (CT2) bus route has recently been expanded to connect the Sullivan Square Orange Line station with Kendall Square, MIT, and the Harvard Medical School campus.

By Pallavi Naresh

The City of Boston is currently designing the "Silver Line," a series of buses which will link key residential areas to important employment nodes in Boston.

The construction of the Silver Line will be split into two phases. Part A of Phase I will link Dudley Station to downtown Boston in its own dedicated lane. Part B of Phase I, which is currently under construction, will consist of a tunnel from South Station to the South Boston Piers area.

Finally, Phase II of the project will extend the tunnel of the Green Line into the downtown area and will connect Parts A and B of Phase I.

Service includes new technology

The Silver Line project will integrate a new technology, called Intelligent Transportation Systems, into its buses. "This technology will allow for, among other things, on-board announcements of stops, real time bus stop information via the web, and advanced notices and public service notices at stops," said Howard Hayward, chief of design and construction for the Massachusetts Bay Transportation Authority.

"We will be one of the first in the country to have such a system online," said Hayward.

Buses offer environmental benefits

The buses on the Silver Line will run on environmentally friendly alternative fuels. "We think the Silver Line will help reduce pollution," Hayward said. "The buses run on electricity underground and compressed natural gas above ground. New maintenance facilities will be

built and old facilities that use diesel buses will be closed."

The Boston City Council, however, is concerned that the Silver Line will not be able to meet growing transportation demands. The Silver Line will be providing long needed access to the Waterfront area in Boston, whose development has been restricted by environmental law.

However, a Municipal Harbor Plan is being proposed, which if approved, will allow for the curbing of existing laws and thus increased construction in the Waterfront district.

"We question the Silver Line's effectiveness," said Councillor Vincent LaBelle. "A bus system is less expensive to implement than a rail system. But, according to projections by the Boston Transportation Department, by 2025 the Silver Line Bus Transit Project will not be able to meet the growth capacity in the Waterfront."

Hayward agreed. "The Silver Line is meant to meet transportation demand until 2025. If overdevelopment in the Waterfront is allowed, then transportation will not meet demand. There will have to be other mass transit improvements to meet demand before and after that date."

Bus Shuttle to Kendall

The MBTA has also added bus service from Sullivan Station to Kendall Square in its Crosstown 2 route. This bus will link the Orange and Red Lines of the MBTA subway system.

The bus operates Monday through Friday, every 20 minutes during peak usage hours, and every 30 to 35 minutes at other times. This service is part of an effort to provide transfers between different public transportation routes from outside of the center of Boston.

We are looking for a few bright stars

With graduation rapidly approaching, it's time to start to really shine. Brilliant people are easily the most valuable asset at Kulicke & Soffa. As the world's largest supplier of semiconductor assembly equipment, we design, manufacture, market and support integrated assembly products of the highest quality. With revenues at a record high and a continuing pattern of exceptional growth, our future looks promising. So can your career when you join us.

CAMPUS CAREER FAIR

10 a.m. - 4 p.m., September 29th, Johnson Athletic Facility and Rockwell Cage Gymnasium

We are seeking individuals for the following career areas:

ELECTRICAL ENGINEERING
PROCESS ENGINEERING

SOFTWARE ENGINEERING
MECHANICAL ENGINEERING

We are also seeking individuals to join our growing Information Technology department in the following areas:

NETWORK ADMINISTRATION
WEB DEVELOPMENT
APPLICATIONS DEVELOPMENT

PROGRAMMING ANALYSIS
SYSTEMS ADMINISTRATION
BUSINESS SYSTEMS ANALYSIS

Make the most of your skills at Kulicke & Soffa. We offer many excellent benefits and a highly competitive salary. If you are unable to attend the Career Fair, send your resume indicating position of interest to attn: Kara Thornton CR, Fax: 215-784-6628. E-mail: kthornton@kns.com, Kulicke & Soffa Industries, Inc., Human Resources CR, 2101 Blair Mill Road, Willow Grove, PA 19090. EOE M/F/D/V.

Use your head, and get a head start by visiting us now at:

www.kns.com

Kulicke & Soffa
Industries Inc

You're at
a greater risk of getting
skin cancer if your
hair is blonde or red.

(No matter how much
of it you have left.)

Fair skin, light eyes and a tendency
to burn in the sun, also put you at a
higher risk. So, examine your skin
regularly. If you find anything
unusual, see your dermatologist.



AMERICAN ACADEMY
OF DERMATOLOGY

For more information, call 1-888-462-DESK
or visit www.aad.org

This space donated by The Tech



ERIKAL BROWN—THE TECH

FACING REALITY

SOMEONE VOICE UP IN A COLD-SHOWER WITH ONE TAPING BEHIND THROUGH HER BRAIN... WHO WAS THIS PERSON IN HER BATHROOM? ...

MEANWHILE BARRY WAS THINKING... "WHOSE BATHROOM AM I IN?"

JEANNE REMEMBERED HAVING TO A PARTY AND GETTING SHAKED OUT OF HER MIND...

BARRY REMEMBERED GETTING DRUNK AND ACTING REALLY STUPID...

WHAT DID I DO? HOW DID I GET MYSELF INTO THIS?...

WHAT ABOUT...

WHAT ABOUT...

WHAT ABOUT AIDS?

WHAT ABOUT AIDS?

THEN THEY BOTH REALIZED MUCH TO THEIR RELIEF THAT UNLIKE THE REST OF US...

THEY WERE JUST CARTOON CHARACTERS!

FOR MORE INFORMATION CALL
1-800-662-HELP

**GET HIGH
GET STUPID
GET AIDS**

AIDS COUNCIL
NATIONAL INSTITUTE ON DRUG ABUSE
U.S. DEPARTMENT OF HEALTH
AND HUMAN SERVICES

This space donated by *The Tech*

in collaboration with MIT Student Cable <http://mitv/>
and the Thistle Alternative News Collective
present:



Prague IMF day of action

Tuesday, September 26
MIT, room 26-100
at 7 PM

The world vs. the banks: Globalization, democracy, and human rights.

in cooperation with The MIT Press and the
MIT Dept. of Brain and Cognitive Sciences
presents:

The First Annual Harry Bradford Stanton Lecture & MIT CogNet™ Launch

featuring:

Lila Gleitman

Co-Director of the Institute for Research in Cognitive Science at the University of Pennsylvania
Introduction by Steven Pinker

Thursday, Sept. 28, 7 pm

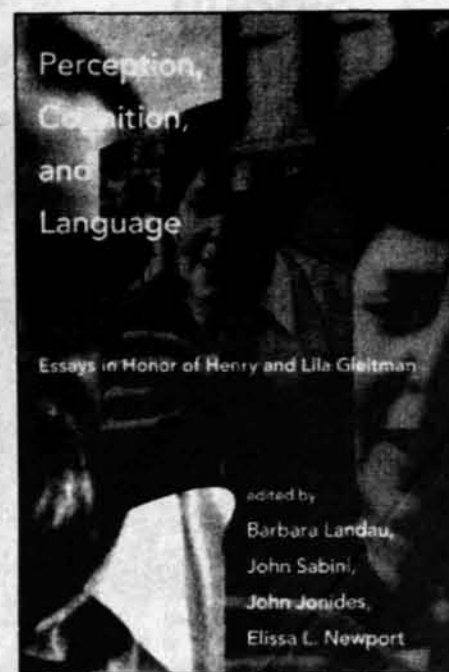
MIT E51 Wong Auditorium, corner of Amherst & Wadsworth Street, Cambridge (near Kendall T)

The annual Harry Bradford Stanton Lecture celebrates the legacy of Harry "The Hat" Stanton, the founder of Bradford Books (an imprint of The MIT Press) and an early supporter of the interdisciplinary field of cognitive science. Bradford Books will publish a monograph based on the lecture program.

The first Harry Bradford Stanton Lecturer is Dr. Lila Gleitman, Co-Director of the Institute for Research in Cognitive Science at the University of Pennsylvania, Fyssen Foundation Laureate, and one of the most influential cognitive scientists of our time. Her work is celebrated in the recently published Bradford Book, *Perception, Cognition, and Language: Essays in Honor of Henry and Lila Gleitman*.

In conjunction with the first Harry Bradford Stanton Lecture, The MIT Press will officially launch MIT CogNet™, the online community for the brain and cognitive sciences. <http://cognet.mit.edu>

authors@mit™ is a series cosponsored by MIT Libraries and The MIT Press Bookstore
Info: 617 253.5249 • authors@mit.edu • <http://mitpress.mit.edu/bookstore/events/>



Be Part of Xicor's Transformation

**Join the enthusiastic team that is transforming
Xicor into a fabless, analog/mixed signal
supplier of semiconductors!**

Xicor's management team has set a strategic course of direction focusing on new proprietary products for high growth markets in the analog and mixed-signal arenas. This transformation includes completing the transition to outsourced manufacturing. We are looking for bright, enthusiastic team players to join us.

Xicor pioneered advanced, electrically programmable mixed signal products that power today's advanced electronic systems. The cell phone you use, the computer on your desktop, your car all contain products likely made by Xicor.

With analog and mixed signal technologies taking center stage in Xicor's strategy for the new millennium, we need talented professionals as we expand our horizons and cultivate new market potential. Come join our team and help us make this transformation.

Please join us for a reception on 9/27, Bld. 4-159, 5:30-7:30 p.m. We will be interviewing on 10/2, Career Services Center, Rm #12-170

Xicor offers competitive salaries and benefits packages.
Visit our website at www.xicor.com for
information on cool job opportunities at Xicor.

The XICOR logo, featuring a large stylized 'X' with a map of Mexico integrated into its left stroke, and the word 'XICOR' in bold capital letters below it.

Xicor, Inc.
1511 Buckeye Drive
Milpitas, CA 95035

Xicor is proud to be an
equal opportunity
and affirmative action
employer

**Win a
PalmV**
drawing held 9/27
Bld #4-159
5:30pm-7:30

Pick-up: milk
brand/coffee

NOTES
DIARY IDEAS

SUBJECT My new company

I awoke to a thunder-
storm at 3 a.m.

That's when the
**LIGHTNING
STRUCK.**

It hits you. The big idea. A flash of Internet brilliance. It'll take hard work, great people and a little luck. But with the right team, your new e-commerce company will change the world.

Enter Silicon Valley Bank. We're not just any bank, we're guides on your journey from idea to IPO. The kind of trusted advisors who help in ways you'd least


expect, such as finding the right VC or angel investor to fund your company.

You see, we understand that start-ups face unique challenges and require special services. Which explains why some of the most successful companies on the Internet got their start with us.

After 17 years, Silicon Valley Bank has grown into

one of the most respected names in the industry. Not only on Sand Hill Road, but around the world. That means we're big enough to serve you in foreign markets, yet still able to give your business personal attention here at home.

For a better idea, go to our web site. And let the journey begin.



Silicon Valley Bank
Ideas to IPOs.

* write business plan
* name/strategy
* breakfast w/ sean/kim

Call SVB (re: account)
1-888-793-2695

Check out: -
www.svb.com

APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
EARS
DATA

BNS 600020

Crossword Solution

W	H	I	S	S	P	S	V	I	S	I	H	W
E	D	I	D	N	I	H	E	N	E	I	V	O
B	W	V	S	V	N	I	T	H	E	C	N	O
N	V	M	I	V	I	L	V	I	S	V	H	S
S	L	V	I	P	I	D	E	C	E	X	E	
S	I	C	V	I	L	E	N	V	H	I		
S	E	E	S	T	V	H	O	C	V	S	V	N
S	O	O	R	V	H	L	X	E	A	I	H	S
O	I	L	O	S	I	S	I	L	E	I	S	I
T	H	V	N	S	I	N	N	V	I			
S	V	N	E	H	V	I	N	V	O	S		
S	V	N	E	H	V	I	N	V	O	S		
B	W	V	S	V	N	I	T	H	E	C	N	O
A	H	E	E	L	E	N	O	V	E	D	O	I
O	V	D	E	D	E	D	E	D	E	D	E	

How Do You Measure the Growth of A Child?

Unfortunately for children living in some of the poorest countries in the world, it takes more than fading marks on a wall.

Childreach, one of the oldest and largest child sponsorship organizations, measures growth by the number of hospitals, wells for clean water, and self-help programs we build in partnership with the proud families and communities where our sponsored children live.

So when you become a Childreach sponsor and receive pictures and letters that speak of hope, you'll know that you have helped to make a real difference in the lives of a needy child, family, and community overseas.

For more information about Childreach sponsorship, please call **1-800-752-3400** or send in the coupon below.

Samuel A. Worthington,
National Executive Director,
Childreach with a sponsored
child in Tarija, Bolivia.



Yes! I want to know more about Childreach.

Name _____
Address _____
City _____
State _____ Zip _____
Area Code _____ Phone _____ V303

Please send to:
Childreach, 155 Plan Way,
Warwick, RI 02886-1099

This space donated by The Tech

Don't think about it,

visualize it!

Stop by and see SGI!

Sunday, October 1, 2000, room 4-145 at 6:00 p.m.

You don't want to miss this...pizza, prizes and career opportunities!

Take a break from your studies and learn more about our unique culture, cutting-edge technology, and inspiring colleagues.

SGI will be accepting resumes for full-time and intern positions at the MIT 2000 Fall Career Fair in the Johnson Athletic Facility, September 28 & 29, 2000, 10:00-4:00.



sgi™

One step ahead.



"You can prevent colon cancer, even beat it."

• HILLARY RODHAM CLINTON •

MAKE THE TIME TO GET A TEST THAT COULD SAVE YOUR LIFE.

Colon cancer is the second leading cancer killer and everyone aged 50 and older is at risk. More than 50,000 Americans will die from colon cancer and 131,600 new cases will be diagnosed this year.

Colon cancer is an equal opportunity disease that affects both women and men. This silent killer frequently begins without symptoms and those with a family history are at even greater risk.

Colon cancer is preventable—even curable when detected early. In fact, if cancer is found early enough, the patient has more than a 90 percent chance of survival.

Colon cancer screenings are safe and effective and are now covered by Medicare and an increasing number of other health providers. There's even a test that can be used in the privacy of your own home.

Talk to your doctor about getting tested.



SPONSORED BY THE NATIONAL COLORECTAL CANCER ROUNDTABLE
FOR MORE INFORMATION, CALL THE AMERICAN CANCER SOCIETY
AT 1-800-ACS-2345

This space donated by *The Tech*

"My friends agonized over choosing
a company to go with. My strategy
was simpler, why join one great
company when you can join many?
I went with GE."

Alphie Mullings
B.S., Electrical Engineering
City College of NY '97

We didn't become *Fortune*® magazine's America's Most Admired Company* by accepting the status quo. We got there by hiring and training confident graduates with the courage to think in innovative and revolutionary ways.

No other corporation can match the diversity of opportunities at GE. Because we have small company attitudes with large company strengths, we set no limits, no boundaries. You can move from industry to industry, discipline to discipline, and never leave GE.

We're a leader in every business we compete in, and we're looking for leaders like Alphie who will take us even further. Start your career by visiting our website now. An Equal Opportunity Employer.

Learn about us at
www.gecareers.com



We bring good things to life.

GE Aircraft Engines • GE Appliances • GE Capital Services • GE Corporate Research and Development • GE Industrial Systems
GE Global eXchange Services • GE Lighting • GE Medical Systems • GE Plastics • GE Power Systems • GE Supply • GE Transportation Systems • NBC

*2/21/00

IT'S ALL ABOUT .

DELL IS COMING TO CAMPUS, and we're interested in meeting the people who are ready to take their talents to the next level. And then some.

MBA COMPANY PRESENTATION

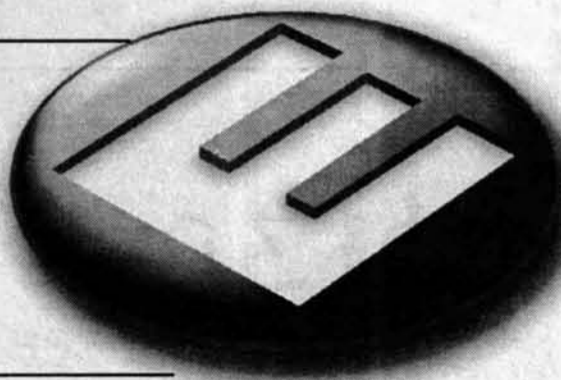
DATE: Wednesday, October 4, 2000

TIME: 6:00 pm

PLACE: The Royal Sonesta Hotel

SPEAKER: Paul McKinnon, SR. VP, HR Management

Interested: Submit your resume online at www.dell.com/studentcareers and for more information on how you can interview with Dell, please visit your career services office.



DELL  COM™

Workforce diversity is an essential part of Dell's commitment to quality and to the future. • We encourage you to apply, whatever your race, gender, color, religion, national origin, age, disability, marital status, sexual orientation, or veteran status. • If you need accommodations to participate in the recruitment process, please let us know. • Dell and the Dell E Com logo are registered trademarks of Dell Computer Corporation.

MIT
Emile Bustani Middle East Seminar
presents

Professor Augustus Richard Norton
International Relations
Boston University

"LEBANON: POST-WITHDRAWAL SYMPTOMS"

Tuesday, October 3, 2000
4:30 - 6:30 p.m.
E51-095
70 Memorial Drive
Cambridge

OPEN TO THE PUBLIC

Sponsored by the Center for International Studies

```
$ find / | grep "high bandwidth devs" \
> adrenaline
```

Adrenaline is a hard core custom software development and product strategy firm that designs and builds applications for emerging Internet businesses. We partner with clients to build technology products that end user customers want and use.

Make an Impact

We're a hands-on office with a minimal management layer. You'll play an integral part in designing, building, and deploying commercial start-up applications, and your work will make it into multiple live web deployments.

New Technology Product Development

At Adrenaline, we have built products for over 50 early-stage, venture backed, and corporate clients. Products include text-to-speech, B2B exchanges (XML), distributed computing, and even a dog food calculator.

Get the Adrenaline Rush

If you have the necessary skills and desire, we will give you the opportunity to design and build some of the hottest Internet technologies around. We seek achievers in the following areas:

- Java Servlet and JDBC Developers
- Oracle/Linux/Solaris Engineers
- Information Architects
- Commercial Product Planners
- Commercial C/ C++ Developers
- Internet System Architects
- Usability Engineers

Adrenaline offers a highly creative, energetic, intellectual, intense, and rewarding environment.

www.adrenaline.com

chump-free zone

java, linux, c++

adrenaline

email: rob@adrenaline.com fax: 512.478.8055

1445 New York Avenue, NW, 4th Floor Washington, DC 20005
221 W. 6th Street, Suite 1550 Austin, TX 78701



sure, you can quit.
or stick around and
[learn]
how not to.

In Army ROTC, you'll develop skills you can use in the real world – thinking on your feet, staying focused under pressure, taking charge. Give it a shot. Visit the Army ROTC department. We'll stick around for you.



ARMY ROTC Unlike any other college course you can take.

Contact Captain Rick Berube at 253-4471,
or visit <http://web.mit.edu/armyrotc>.

Council Emphasizes Traffic Flow Issues



PEDRO L. ARRECHEA—THE TECH

Councillor Marjorie C. Decker shares a private comment with Councilor Kenneth E. Reeves during last night's hearing on MIT and Harvard development in Cambridge.

City Council, from Page 1

City Council was the removal of real estate from the tax rolls.

Sullivan asked, "What will happen when [properties which currently remain on tax rolls] come off?"

Bacow tried to ease concerns that the new plans would reduce property tax revenues, saying that only properties "in the Academic Plan go off tax rolls, and all of the projects presented tonight are already in the Academic Plan."

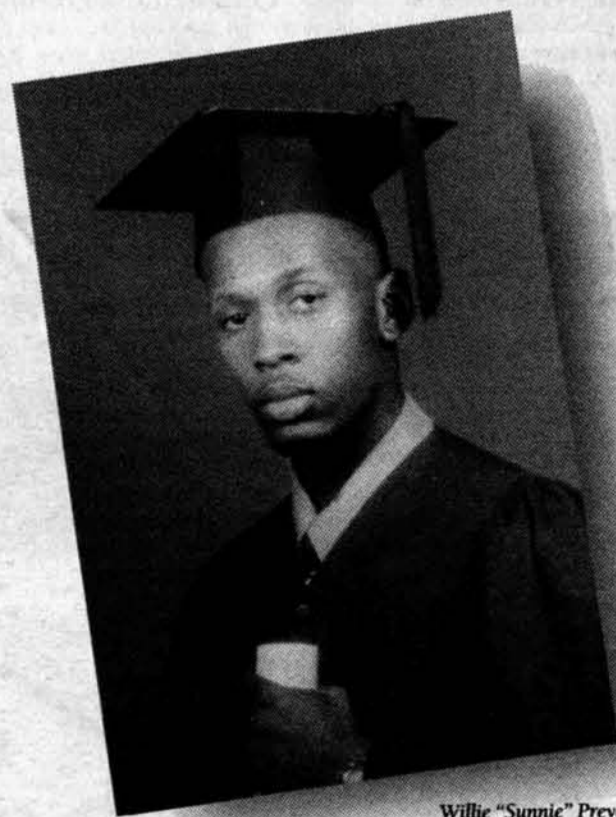
Bacow also discussed plans to build up the Institute academic infrastructure. Projects such as the Stata Center, designed by Frank Gehry, which will house computer

science, electrical engineering, artificial intelligence, and linguistics facilities, were listed as examples of how MIT expansion can benefit both the school and the city of Cambridge.

In an attempt to inform the city of future developments, Bacow mentioned some tentative plans, such as the Microphotonics Center.

He capped off his presentation by unveiling a plan which would put \$28.5 million into improving Cambridge's traffic infrastructure.

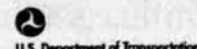
In his final summary, Bacow assured the councillors that, although "[MIT] will build new housing," the Institute will always take community impact into consideration.



Willie "Sunnie" Prevo
Graduating: June 4, 1992.
Killed: May 28, 1992
Cleveland, OH

If you don't stop someone from driving drunk, who will? Do whatever it takes.

FRIENDS DON'T LET FRIENDS DRIVE DRUNK.



BE LESS PRODUCTIVE
AT THE OFFICE.

The office has always been a place to get ahead. Unfortunately, it's also a place where a lot of natural resources start to fall behind. Take a look around the next time you're at work. See how many lights are left on when people leave. See how much paper is being wasted. How much electricity is being used to run computers that are left on. Look at how much water is being wasted in the restrooms. And how much solid waste is being thrown out in the trash cans. We bet it's a lot.

Now, here are some simple ways you can produce less waste at work.

When you're at the copier, only make the copies you need. Use both sides of the paper when writing a memo. Turn off your light when you leave. Use a lower watt bulb in your lamps. Drink your coffee or tea out of mugs instead of throwaway cups.

IT'S A CONNECTED WORLD. DO YOUR SHARE.

Ad Council

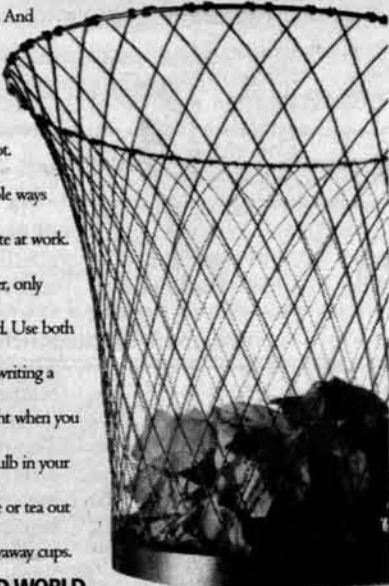
A Public Service of This Publication

Earth Share

Set up a recycling bin for aluminum cans and one for bottles. And when you're in the bathroom brushing your teeth or washing your face, don't let the faucet run. Remember, if we use fewer resources today, we'll save more for tomorrow. Which would truly be a job well done.

FOR MORE INFORMATION AND TIPS

CALL 1-800-MY-SHARE



This space donated by The Tech

Join the
Revolution




National Instruments, a world leader in computer-based measurement and automation, is revolutionizing the way engineers and scientists use PCs to monitor and understand the world around us. We're building the future at National Instruments, and we want you on our team!

Visit us at Booth K26 in the Rockwell Cage!
Undergraduate Career Fair - Friday, Sept. 29, 10 AM - 4 PM

NATIONAL
INSTRUMENTS

/

www.ni.com

IT'S ALL ABOUT .

DELL IS COMING TO CAMPUS, and we're interested in meeting the people who are ready to take their talents to the next level. And then some.

MBA COMPANY PRESENTATION

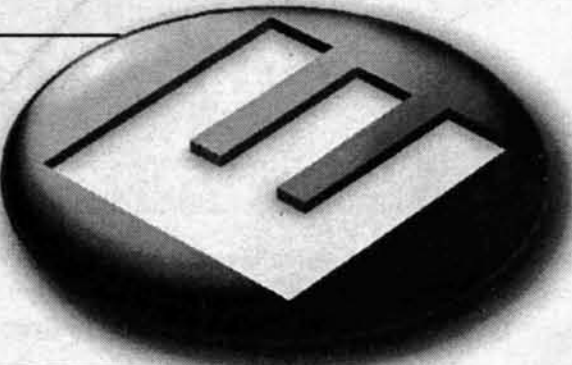
DATE: Wednesday, October 4, 2000

TIME: 6:00 pm

PLACE: The Royal Sonesta Hotel

SPEAKER: Paul McKinnon, SR. VP, HR Management


Interested: Submit your resume online at www.dell.com/studentcareers and for more information on how you can interview with Dell, please visit your career services office.




DELLCOM

Workforce diversity is an essential part of Dell's commitment to quality and to the future. • We encourage you to apply, whatever your race, gender, color, religion, national origin, age, disability, marital status, sexual orientation, or veteran status. • If you need accommodations to participate in the recruitment process, please let us know. • Dell and the Dell E Com logo are registered trademarks of Dell Computer Corporation.

ARE YOU
ONE OF THE BEST
SOFTWARE ENGINEERS?



INTERESTED IN AN EXCITING CAREER
WITH A WORLD-WIDE TECHNOLOGY LEADER?

OPNET

Optimum Network Performance

www.opnet.com

Come visit our Booth

OPNET Fair
Tuesday, September 26, 2000
6:00 p.m. - 9:00 p.m.
Building 14, Room 401

MT Career Fair
Thursday, September 28, 2000
10:00 a.m. - 4:00 p.m.
Rockwell Cage

MT Career Fair
Friday, September 29, 2000
10:00 a.m. - 4:00 p.m.
Rockwell Cage

Information Session
Tuesday, October 3, 2000
7:00 p.m.
Building 14, Room 401

On-Campus Interviews
MT
Wednesday, October 4, 2000
9:00 a.m. - 5:00 p.m.
Building 12, Room 170

Contact Information
OPNET, 3000 Gateway, Dr.
3400 International Circle NW
Washington, DC 20009
Attn: JHS16T
Fax: (202) 394-2564
Phone: (202) 394-8700
E-mail: jhs16t@opnet.com

Age of Empires
Starcraft
Total Annihilation
Dark Reign 2

If you love to play these games and if you have experience with designing scenarios or creating game mods for PC games, then you are the person we need to help us create our next generation RTS game called **Empire Earth**.

JOIN OUR PLAY TEST PROGRAM

Contact Dara-Lynn at:

llovemyjob@stainlesssteelstudios.com

Please include your phone number

Stainless Steel Studios, Inc.
Kendall Square, Cambridge

Tax info, toll-free.

Tax questions? Call TeleTax for recorded information on about 150 tax topics, 24 hours a day.



Department of the Treasury
Internal Revenue Service
<http://www.ustreas.gov>



TeleTax
1-800-829-4477

This space donated by *The Tech*



Squeezed For Cash?

Take The Bus!

No gas money. No tolls.
No parking. No smelly Bob.

Save a few bucks and catch a ride home in Billy's car!...with Jason, Thomas, sleazy Andrew, crazy Jennifer, Kevin and smelly Bob. Oh, and Billy needs the car back on Sunday. Be sure to bring fifty bucks for gas and tolls...**whatever!** How 'bout some personal space? Maybe leaving on your own time, with some a/c, more leg room, a bathroom...and on some schedules, even a movie. Take your next ride home with Peter Pan/Greyhound. And leave smelly Bob behind.



Peter Pan
www.peterpanbus.com



GREYHOUND.
www.greyhound.com

Another valuable lesson learned from Hollywood: **52** of 74



Every hooker has a heart of gold, but none of them have herpes.

Introducing Nibblebox.com. Tomorrow's entertainment today.

Log on for original episodic shows, interactive entertainment, and the best of college radio created by college students with help from directors like Doug Liman (*Swingers*), and producers like Sherry Gunther (*The Simpsons*). Because while it's fun making cynical comments about entertainment clichés, it's more fun to see what students are actually doing about it.

nibblebox.com

digital entertainment in short, tasty bytes.

© Nibblebox 2000

HOW TO USE THE BATHROOM.

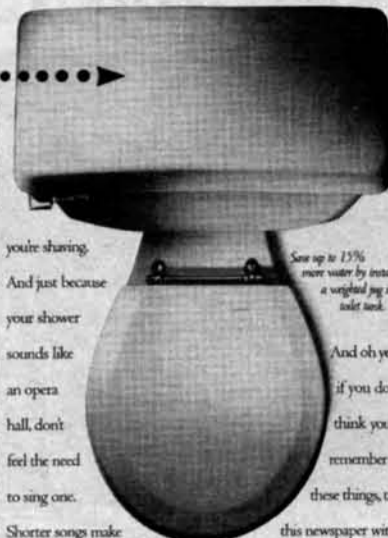
You're probably saying to yourself, any four-year-old knows how to use the bathroom. But you may not know that you use more water in the bathroom than anywhere else in your home. In fact, between the



You could end up using 30 to 60% less water by using a low-flow shower head.

toilet, the shower and the sink you can use up to 55 gallons a day. Multiply that by the number of homes in the world, and that's a lot of natural resources going down the drain.

Now, we're not saying you should stop taking showers or brushing your teeth. We're just suggesting some simple bathroom training. For instance, when you're brushing your teeth, turn off the water. Do the same when



Save up to 15% more water by installing a weighted jug in your toilet tank.

you're shaving. And just because your shower sounds like an opera hall, don't feel the need to sing one.

Shorter songs make for shorter showers. And for the biggest culprit of them all, the toilet, try putting a weighted jug in the tank. It will help save water every time you flush. Plus, don't forget to turn out the lights when you leave. You'll be helping to conserve electricity.

these things, take this newspaper with you the next time you go.

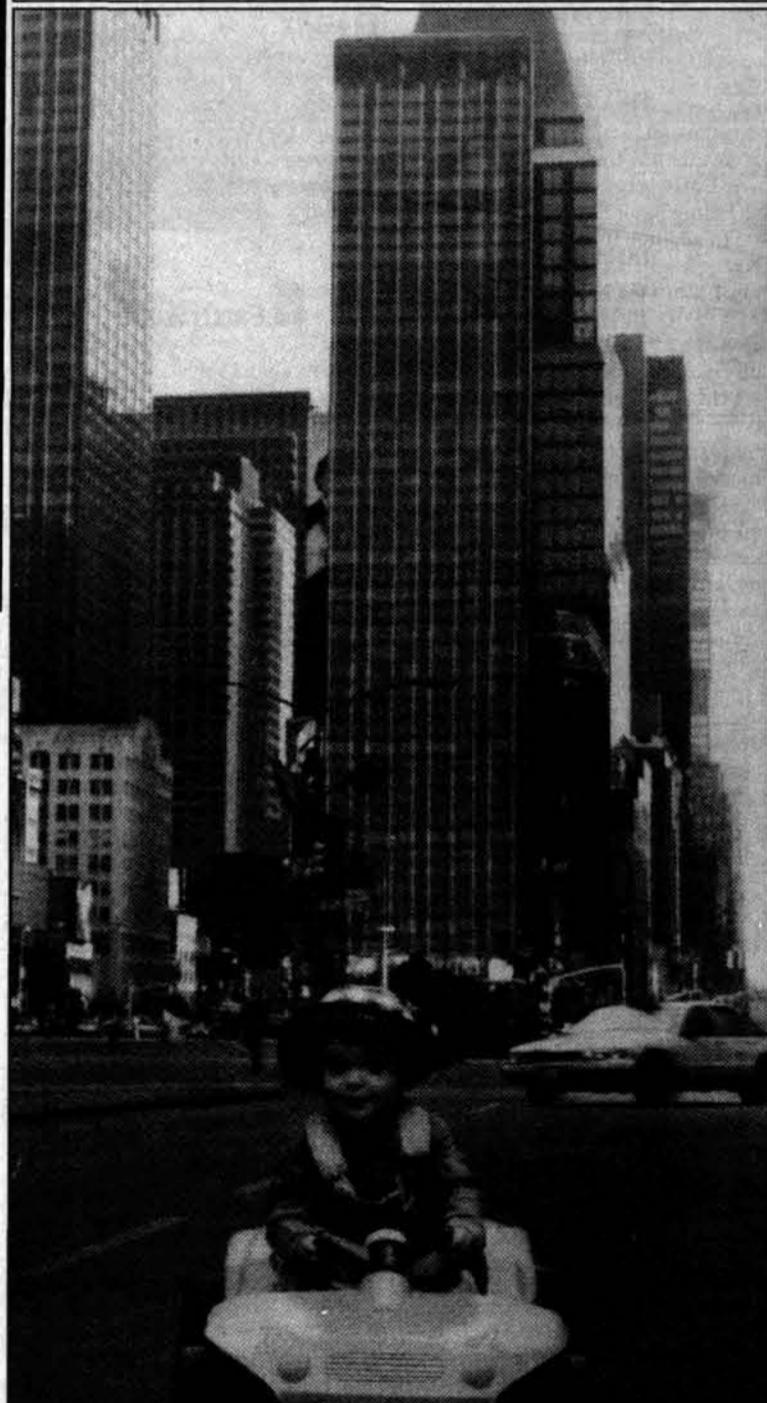
This message brought to you by the 43 environmental charities that make up Earth Share.

For more tips or information on how you can help, visit Earth Share, 3800 International Drive NW, Suite 2K (AD2), Washington, D.C. 20008.

Earth Share

IT'S A CONNECTED WORLD. DO YOUR SHARE.

This space donated by *The Tech*



Not getting your child all her shots is like leaving her out here alone.

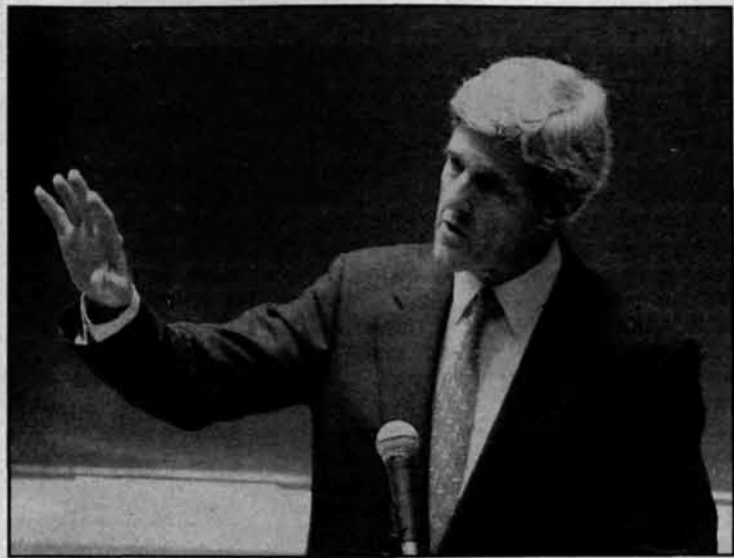
At least 11 shots by two. How sure are you?
Questions? Call 1-800-232-2522.

U.S. Department of Health and Human Services



This space donated by *The Tech*

U.S. Must Play More Active Role in World



Massachusetts Senator John Kerry stresses the importance of education at the Regional Sustainable Development Forum yesterday.

Forum, from Page 1

environmental problems, Kerry advocated an overhaul of the public education system. "Education is key. I'm talking about the basics of education. [We need to] fix the public schools. ... If you don't educate kids, you can't have democracy that works," Kerry said.

Kerry, however, rejected the idea of charter schools and vouchers, citing the fact that 90 percent of students attend public schools, and that no matter how many charter schools are built, students will still be attending public schools.

In addition to educating students, Kerry said that the United States must also take an active role internationally in standing up for the environment. When discussing the environmental problems of the world at large, Kerry said that America shoulders much of the blame. "We're the real stumbling block — the United States," he said.

Kerry said that because the United States has not decreased emissions, it has been acting out of accord with the other developing nations of the world, who are now reluctant to further reduce their emissions.

Kerry also briefly touched on the effects of urban sprawl on the concentration of wealth. "Sprawl concentrates poverty in urban centers ... [there has been] insufficient effort to guarantee we have an

urban plan."

The last part of Kerry's speech dealt with the common view that focusing on the environment would lead to a loss of jobs or an increase in taxes. Kerry said that cleaning up the environment does not necessarily mean either of those consequences, and, in fact, can lead to an expansion of jobs.

The forum, sponsored by New Ecology Inc., later broke into workshops run by experts in various fields of environmental planning and design. Topics included housing strategies, regional development planning, and recycling-based economic programs.

The conference designers hoped to establish a network of designers and planners that will lead metropolitan areas towards an environmentally sound future.

What will you be doing after graduation?

Our consultants will:

- Create the business plan for a high-tech start-up
- Develop the next generation strategy for a major telco
- Design a market strategy for an unregulated power producer
- Evaluate investments for a private equity fund

Information Sessions:

Undergraduate:

Tuesday, October 3, 5:30 P.M.
Room 4-153

Ph.D:

Thursday, October 5, 6:00 P.M.
Cambridge Marriott, Kendall Square

DEAN & COMPANY

STRATEGY CONSULTANTS

Come see us
Friday at the

**MIT
Career Fair
2000**

Undergraduate:

Drop resumes off at Career Services by October 26th

Ph.D:

Send resumes by November 14th to:
Kristin Miner • Recruiting Coordinator
8065 Leesburg Pike, 5th Floor • Vienna, Virginia 22182
Fax: 703.506.3905 • Email: recruiting@dean.com

www.dean.com

Dean & Company is an Equal Opportunity Employer

GUEST SPEAKER COMMENCEMENT EXERCISES 2001

The Commencement Committee invites suggestions for the guest speaker at MIT's Commencement Exercises on Friday 8 June from all members of the community. The commencement speaker should be one who will be able to address topics of relevance to MIT.

Written suggestions may be dropped off at the Undergraduate Association Office – Room W20-401, Graduate Student Council Office – Room 50-222, and Information Center – Room 7-121.

In addition, suggestions may be filed with Erick Tseng – President of the Class of 2001 (erick@mit.edu), Soulaymane Kachani – President of the Graduate Student Council (kachani@mit.edu), Gayle Gallagher – Executive Officer for Commencement (gayle@mit.edu), and Eric Grimson – Chairman of the Commencement Committee (welg@ai.mit.edu).

Suggestions must be received by Friday 6 October.

Following a review, the Committee will submit a list to President Vest for consideration. The list will not be made public. President Vest has the responsibility and authority for selecting and inviting a guest speaker for the Commencement Exercises.



**Ever Get A Pal
Smashed?**

TAKE THE KEYS.
CALL A CAB.
TAKE A STAND.

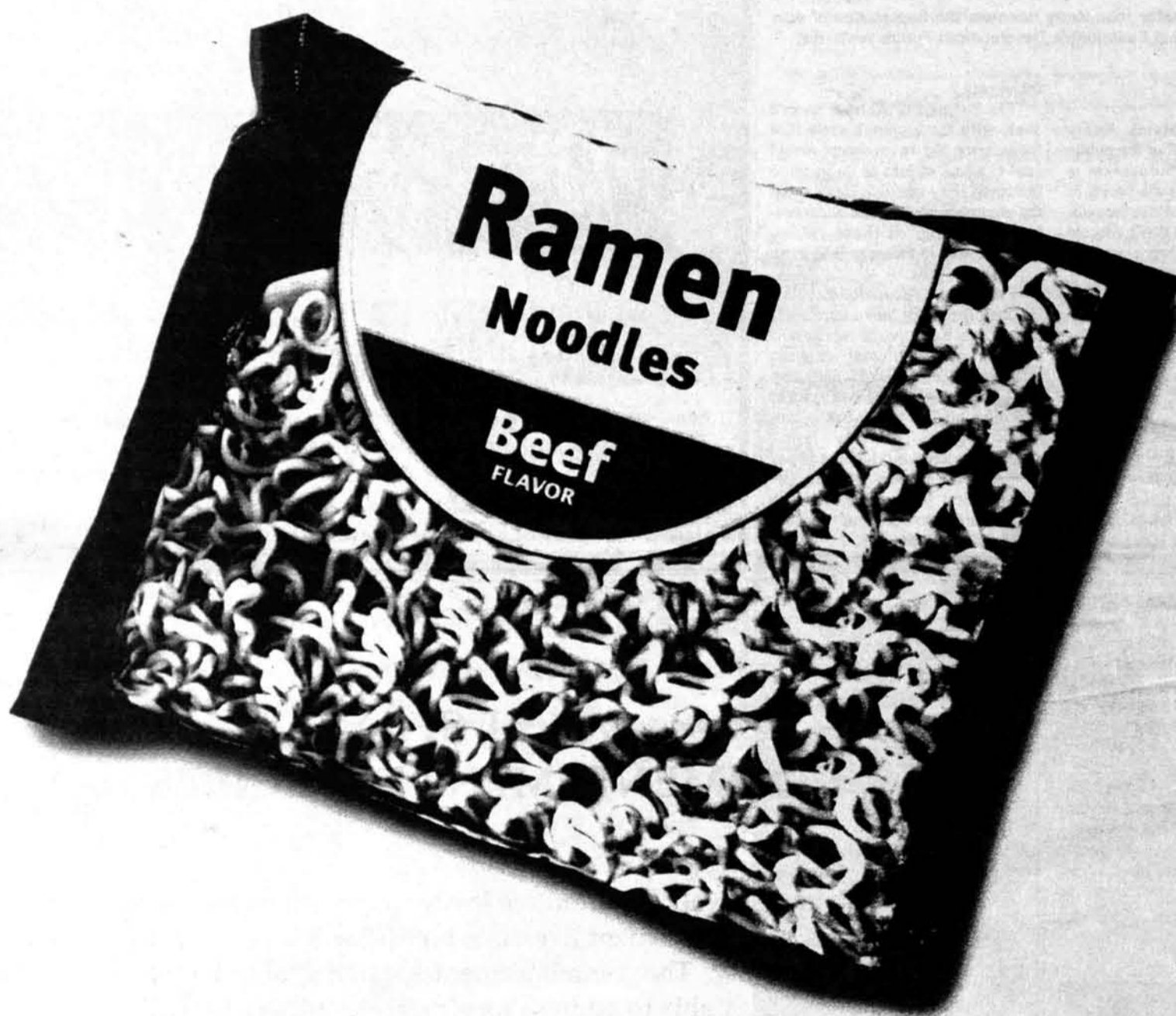


**FRIENDS DON'T LET FRIENDS
DRIVE DRUNK.**

Ad Council U.S. Department of Transportation

This space donated by The Tech

tired of *29¢ meals?*



OneSoft. When it's time to make a real living, we'll give you the opportunities you've been looking for. Join us and discover cutting-edge eCommerce. Learn the latest technologies. Plan a successful future. Work hard. Have fun. And enjoy our highly competitive salary and benefits package. If you've got the brains, the skills, and the desire, check us out.

www.onesoft.com ♦ email: college@onesoft.com

ONESOFT
THE INTERNET COMMERCE COMPANY